

INTRODUCTION

The Cadaver Transplant Program initiated by the Government of Tamil Nadu in October 2008 has been a great success. There have been 124 deceased donors over a two year period ending September 2010, the best any State has seen so far. But the realizable potential is much larger. This can be seen from the fact that five hospitals alone contributed more than four fifths of the donors. The potential is such that cadaver organ donations could put an effective end to the demand for illegal kidney trade.

The primary stimulus for this remarkable performance in the State has been the proactive involvement of the State government in issuing a series of Government Orders to clarify and simplify the regulatory framework within which such transplantation can be coordinated. It, however, becomes a challenging task for a transplant hospital to navigate the many clauses of the THO Act, its Rules and the several G.O.s and subsequent Guidelines to decide on what to do in each circumstance, especially if that hospital is new to cadaver transplantation activity. It is to assist such hospitals in that effort that this Guide Book has been prepared in a Question and Answer format.

The first version of this book was circulated among the participants who attended a Workshop organized by the State government on 4 April 2009. The second version, with more supplementary information and incorporating further changes made to the coordination arrangement as operative in mid September, 2009 was released in the Workshop held on 22 September 2009 to mark the one year completion of the program. This is the fifth version, incorporating the decisions taken in the Fourth Meeting of the Advisory Committee and brought out in November, 2010.

We hope this Guide Book will serve its purpose of further promoting cadaver organ donation in the State. We welcome your further questions and suggestions to make this Guide Book more effective in future versions. The latest and updated version of this Guide Book can be accessed at our website www.nnos.org.

Dr R Swaminathan,
Chairman,
National Network for Organ Sharing.

A GUIDE TO DECEASED DONOR TRANSPLANTATION IN TAMIL NADU

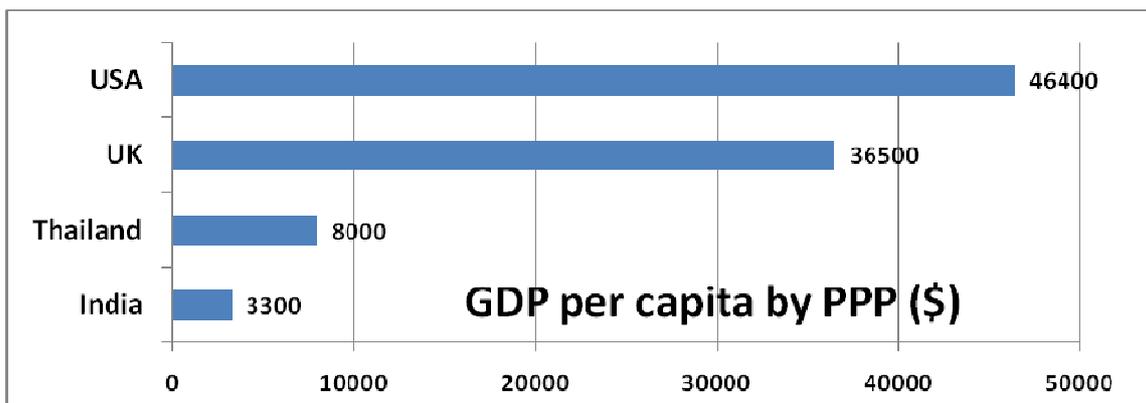
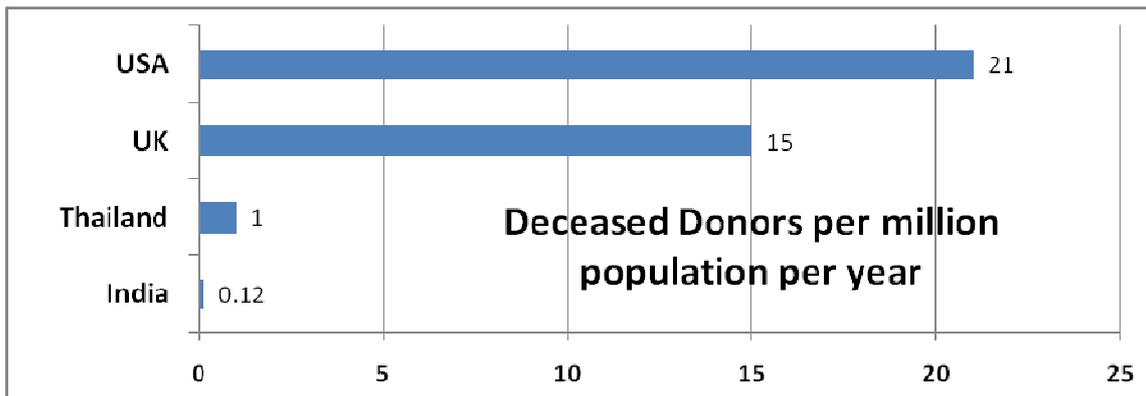
(Since the Act, Rules and G.O.s and the Guidelines are not easy to navigate to get answers to specific questions, the following has been prepared to make the total framework easier to understand. This deals with only cadaveric donor transplantation and excludes live donor transplantation)

Why Deceased Donor (or Cadaveric) Transplantation?

- Because it saves lives
- Because it can eliminate illegal organ trade
- Because India lags far behind world average in such transplantation
- Because technology and physical infrastructure are available
- Because most people are willing to donate cadaver organs when asked

How much does India lag?

See this.



As one can see here, India's economic prosperity is not as far behind other countries (in purchasing power parity terms) as its record is in cadaver donation (as estimated for 2009) – one tenth that of Thailand. But this is changing rapidly in Tamil Nadu. It currently

generates deceased donors close to seven a month, which works out to a rate of 1.2 per million population of the state per year, ten times that of the country as a whole.

How did this happen?

In early 2007, a kidney scam surfaced, as a result of which, the government decided to arrest commercialization of live kidney transplants and to promote the growth of deceased donor organ transplants in the State. With this object in view, the Health & Family Welfare Department of the Government of Tamil Nadu organized a Workshop in March 2007, co-sponsored by NNOS. Representatives and senior doctors from several transplant hospitals all over Tamil Nadu participated in this day-long workshop. To highlight the importance attached to this exercise the Hon'ble Minister for Health and Family Welfare and the Principal Secretary to Government, Health & Family Welfare Department participated in both the inaugural session in the morning and the valedictory session in the afternoon.

The Workshop participants were organized into four Working Groups that deliberated on these issues: 1. Live donors 2. Transplantation Formalities 3. Cadaver Transplant 4. Coordinating Organization. At the valedictory session the moderators of the Working Groups presented a total of 33 recommendations for follow up action.

The Government gave serious consideration to these recommendations and held frequent consultations with the stakeholders. As a result of this, a series of Government Orders were issued to lay down a set of norms that would supplement the Transplantation of Human Organs Act (THOA) and its Rules and establish a framework through which organs can be allotted in a fair manner to the potential recipients that await organ transplantation.

By the time these government orders were in place, the case of a doctor couple donating the heart of their young son who died in a traffic accident to save the life of a young girl, got wide publicity and made an emotional connection with the people at large. This, as well as the publicity some more donations got, spurred voluntary offers from relatives of brain dead persons.

These two worked together to create a momentum for organ donations. To sustain and increase the momentum, it is necessary that hospitals in the state become fully aware of all the government orders and cooperate fully with the system to achieve its goals.

Is it really necessary to have so many G.O.s and a laid down system for this?

To quote from G.O. (Ms) No.288 dated 05.09.2008: "Considering the fact that cadaver donation is done with altruistic motives and in a generous charitable manner as a willing contribution to society, it is necessary that cadaver donation be governed by transparency on all fronts to ensure that the sentiments of the donor's relatives are adequately respected. Hence, it is considered necessary that a certain degree of accountability is also insisted upon."

The other reason is that the Transplantation of Human Organs Act (THOA) is but an enabling legislation as far as deceased donor transplantation is concerned. Some more steps need to be clarified to make it easier for hospitals to follow the rules and to share organs amongst themselves from the time brain-stem death (also called brain death) is identified in any hospital.

Is brain death legal death?

Yes, while brain-stem death – "the stage at which all functions of the brain-stem have permanently and irreversibly ceased" (THOA) - is recognized as death in most countries of

the world, the THOA is the only legislation in India that confirms it as legal death, provided it is certified according to the procedure laid down by it. This procedure is made easier to follow by the G.O.s mentioned above.

How is brain death to be certified?

By filling in Form 8 of THOA Rules – see Annexure 5 or G.O. (Ms) No. 75 of 03.03.2008 in Annexure 2. Four doctors should sign this certificate:

1. RMO, ARMO, Duty RMO, RMP in charge of the Hospital or RMP Head of the Institution.
2. RMP (Physician, Surgeon or Intensivist) from a panel of names nominated by the Hospital and approved by the Appropriate Authority
3. Neurologist or Neuro-Surgeon from a panel of names nominated by the Hospital and approved by the Appropriate Authority
4. RMP / Doctor on duty treating the patient

Of these, Doctor 2 or Doctor 3 should carry out the First and Second Medical Examinations specified in Form 8, with a time gap of minimum six hours between the two examinations. A guideline for carrying out one of the specified tests, the Apnea test, is provided in G.O. (Ms) No. 75 of 03.03.2008 (Annexure 2).

Hospitals need to send a list of names, along with the medical registration certificates of the doctors to be approved as Doctors 2 and 3 to the Director of Medical Services and Rural Health (DMS) who is the Appropriate Authority for the State. The DMS will respond approving the panel of names. There is no need to get approvals for Doctors 1 and 4. Transplant hospitals that do not have their own Neurologist / Neuro-Surgeons can use the services of an approved Doctor 3 from any other hospital for purposes of Form 8.

Do the changes made to the THO Rules affect this procedure or Form?

No, they do not. The Central Government has amended the THO Rules effective 4-8-2008 and the State Government has notified it vide *G.O. Ms. No. 179, Health and Family Welfare* dated 18-6-2009, but these changes mostly concern live donation and the Forms connected to that. The procedures and Forms 6, 8 & 9 relating to deceased donor transplantation remain unchanged.

Are changes contemplated to the THO Act itself? What are they?

Yes, a Bill to amend the Act was introduced in Parliament on December 18, 2009. This was referred to the Parliamentary Committee on Health and Family Welfare on January 25, 2010. The Committee called for views on the Bill, held hearings and submitted its Report to Parliament on August 4, 2010. The Ministry is in the process of revising the Bill in the light of this Report. Until this revised Bill is introduced in Parliament and passed and subsequently endorsed by the State Legislative Assembly of Tamil Nadu, the Act and Rules as they exist now will be operational. (Texts of the Bill, the Report and other related material can be accessed at http://www.prsindia.org/index.php?name=Sections&action=bill_details&id=6&bill_id=982&category=43&parent_category=1)

I am a transplant hospital registered as such with the DMS. What are the things I should look out for in the context of deceased donor transplantation?

Please ensure that your registration is kept renewed every five years for each organ you transplant. Send your renewal request three months before the date of expiry. Maintain transplant surgery records for a minimum period of ten years.

Set up a counseling service for individuals involved in organ transplant and designate a Transplant Coordinator to coordinate all aspects of transplantation on behalf of the hospital. Avoid media publicity on transplantation till the discharge of the applicant. Even then do not give details of the recipient and follow the ethics of the medical profession. Post the approximate cost range of transplant surgery on your website and on Health Department designated website. Post total number of transplantations done in your hospital along with details of each transplantation on your website.

You are free to join the Cadaver Transplant Program of Tamil Nadu and become part of the organ sharing network. This will enable you to receive deceased donor organs from other transplant or non-transplant hospitals for your patients and to share organs with others. For this, if you are a private hospital, you have to send an initial admission fee of Rs.10,000 (Rupees ten thousand) by way of D/D drawn on “TNMSC - Organ Transplant” and send it to the Convenor, Cadaver Transplant Program (CCTP), 165 A, Tower Block I, 6th Floor, [Next to Bone Bank], Government General Hospital Chennai - 600 003. This will enable you to register your hospital online at the website www.tnos.org and participate in the total networking.

Please see Annexure 6 to learn more about how to use this online facility. Please ensure that the password access to the website is restricted to only one or two key persons in your organization and the access is handled with full responsibility and confidentiality.

Please make sure that there is a single point of contact at your hospital for the Convenor and at least two telephone lines are available 24x7 for purposes of organ sharing communication, some of which will happen in the middle of the night.

Is there any further annual fee for participating in this Program?

No. There is no annual fee. Participating hospitals are free to contribute towards the costs of state level coordination, training programs, awareness generation programs and all other activities that will make this program a success by sending cheques or D/D drawn on “TNMSC - Organ Transplant” to the Convenor, Cadaver Transplant Program (CCTP), 165 A, Tower Block I, 6th Floor, [Next to Bone Bank], Government General Hospital Chennai - 600 003.

What steps should I take up after I join this network?

First, prepare a waitlist of your patients that await transplantation for each organ you are authorized to transplant. Upload details of the Kidney waitlist through an online form on the website www.tnos.org making sure that all persons on the waitlist have been on dialysis for at least two months and have been counseled and are ready for transplant surgery at very short notice. One of the essential information to be provided in that form is the date on which dialysis was started. Please ensure that there is solid authentication that is verifiable for this. Make sure that additions, deletions and modifications are made promptly and see that the list is kept up to date all the time. Please see Annexure 6 on how to do all this online.

For Liver, Heart and Lung, please prepare your waitlist of patients, establish your own criteria based on which you wish to prioritize allocation of each organ available to you, arrange the waitlist in that order of prioritization and send to the Convenor the criteria as

well as the prioritized list for each organ by filling in all this information in a spreadsheet format that the Convenor will send to you. Whenever any change is effected to that list, please communicate the new list to him promptly.

For Kidney too, while the Convenor maintains your hospital waitlist as well as combined lists of hospitals, you too need to maintain your hospital waitlist. You are free to evolve your own criteria for recipient prioritization on your hospital list whenever there is an in-house donor and you get automatic allocation of one Kidney – denoted as Local Kidney - as explained later, but you should keep the Convenor posted of your criteria and the updated prioritized hospital list in the same manner as for the organs explained above, in the format you can obtain from the Convenor. It would be advisable for you to alert and maintain communication with top three on your waitlist to be available for surgery when an organ becomes suddenly available.

Ensure that the recipient is registered with only one transplant hospital at a time. The recipient registered through one transplant hospital is free to shift to another transplant hospital; when this happens, inform the Convenor and ensure that her original date of registration is maintained in the registry.

When a brain death occurs at your hospital, ensure that the family is counseled for organ donation and the brain death gets certified following the procedure described above.

What should I do when the family agrees to donate?

Make sure that Form 6 of THO Rules gets signed – Form 9, if the donor is below the age of 18 – by the donating family to authenticate the consent. This is necessary even if the patient had earlier expressed a desire to donate organs.

Inform the Convenor, or his representative, over the phone immediately with information on name, sex, age, weight and blood group of the donor and any other information he asks for and keep him posted of the cadaver maintenance status.

One Kidney, Liver and Heart get automatically allotted to your hospital's patients and are called Local organs. The other Kidney - and Liver and Heart, if you do only Kidney transplant – become Share organs and will be allocated to patients in other hospitals by the Convenor. Local organs are to be allocated by you, strictly following the prioritization of your Hospital List that has been sent to the Convenor. Inform the patient on top of your Hospital List the time of surgery and alert the next on the list. If your hospital waitlist prioritization is not adhered to, for any reason, explain this to the Convenor straightaway.

When an organ from the deceased donor is allotted as Share by the Convenor to other hospital/s, please cooperate fully with the recipient hospital/s by providing all information on the donor, blood sample and tests if needed and schedule the organ retrieval to suit all concerned.

Please also ask the family to donate cornea and arrange with a local eye bank to utilize it. If, for any reason, heart cannot be used, heart valves can be utilized and will be allocated by the Convenor.

There could be rare cases where the relatives of a Deceased Donor request that an organ of the Donor be allotted to a near relative of the Donor – spouse, son, daughter, father, mother, brother or sister - suffering from failure of that organ. In such cases, please verify the facts of the case and accede to it with the approval of the Convenor.

Please keep the donor family posted of the organ utilization procedure and assist them with all formalities, including police liaison in road traffic accident or such medico-legal cases.

How does one handle medico-legal cases?

Nearly four fifths of cadaveric organ donations in TN arise from road traffic accident victims. All of them are medico-legal cases and the donating families suffer considerable delay in getting the body back because of the procedures involved. There is also some lack of clarity in the THO Act on this issue. Hence the TN Government passed G.O. (Ms) No.259 on 14-09-2010, (see Annexure 2) laying down a comprehensive procedure for this purpose.

According to this procedure, as soon as the first test for certification of brain death is done in an organ donation situation, the concerned police officer to conduct inquest will be asked to come to the hospital, using Form 1 specified in the G.O. so that he can start the inquest when the second test is completed and death is certified. He should be provided the formal death intimation and copies of Form 8 (brain death certification) and Form 6 (family consent for organ donation). If that officer finds that post mortem is not required for the purpose of the inquest, he will inform the family and organ retrieval can proceed.

Should the police officer decide that a post mortem examination is needed, the hospital should provide him an 'Organ functional Status Certificate' issued by the treating medical officer per Form II given in the G.O. The police officer will then forward this Form as also copies of Forms 6 and 8 along with a post mortem requisition to the medical officer designated to conduct the post mortem. That medical officer will then issue an 'Organ Retrieval Authorization form' permitting organ retrieval. Organ retrieval will then be done, after which the body will be handed over for postmortem examination.

A significant feature of the G.O. is that it makes it possible for your hospital to utilize the services of the medical officer(s) from the Forensic Medicine Department of the Government Medical Colleges or any other qualified Forensic Medicine Expert(s) or any Government medical officer(s) who has/have experience in post-mortem work to carry out the post mortem examination. This can be done on your premises itself, immediately after organ retrieval and can save substantial time and worry for the donor family.

Further, the Police Department has sent a circular on 13-07-2009 stating that in such accident cases, the hospital's local jurisdiction police can conduct the inquest and one need not wait for the investigating officer from where the case was registered or the occurrence took place. (See Annexure 2) This facility can be used to minimize delays and inconvenience to the donor family.

What should I do after organ retrieval?

Do send the information report on donation to the Convenor as early as possible, within 48 hours of organ retrieval, through the online form at the website <http://dmrhs.org>. Fill in separate forms for donor and for Local organ recipients. Send him also a monthly statement of donations and transplants done in the format asked by the Convenor. The Convenor will also send you a form for study and analysis of long term clinical results of transplant surgery. Send periodic information on that format as well.

What about the costs involved in this exercise?

If you are a private hospital where organ donation takes place, you are entitled to be reimbursed of all costs incurred by you on the donor cadaver from the time the donor family consents to donate, including assistance in removing, transporting and preserving the

organs, as determined by you, subject to a ceiling amount of Rs.75, 000/-. This cost will be allocated equally to all major organs such as kidney, liver and heart removed from that cadaver by private hospitals, including organs removed by your hospital; the private recipient hospitals of those organs will reimburse their share of the cost to your hospital on requisition made to them by you. Government donor hospitals and government recipient hospitals are excluded from this procedure. (As example, if your total cost amounts to Rs. 60,000 and you utilize a local kidney and share the other kidney and liver with two other private hospitals, you can ask those two hospitals to reimburse you of your costs by an amount of Rs. 20,000/- each. If, by chance, one of the two share organs went to a government hospital, you can ask the other private hospital to share your cost to an extent of Rs. 30,000/-.)

What is the procedure when I get allotted a Share organ?

Share organ is the second kidney from a donor hospital and any other organ it is unable to utilize, that is allocated to another hospital. Please ensure that there is 24 hour availability of your transplant coordinator to interact with the Convenor. When a Share organ is offered to a particular recipient on your list, contact that recipient immediately, arrange all logistics and convey your acceptance of the offer within one hour. Offer would expire if not accepted within one hour. If the Convenor alerts that one of your recipients shows up as second in the priority for allocation, alert that person and be ready to accept the offer within 45 minutes should a firm offer be made subsequently. (Not accepting an offer will not detract the Recipient from prioritization in subsequent offers.)

It is your responsibility to interact with donor hospital to obtain all information you need to assess the suitability and match of organ with your recipient. It is also your responsibility to send a team to the donor hospital to retrieve organ, preserve it and bring back for transplantation.

If you are a private hospital and receive the Share organ from a private hospital, you need to defray the costs incurred by the donor hospital, if asked by them, in the manner described earlier.

Inform the Convenor as soon as the surgery is over and send a fuller recipient report to him through the online form at <http://dmrhs.org> within 48 hours of discharge of patient. Send him also a monthly statement of the transplants done as well as periodic reports on long term clinical results of transplant surgeries.

How is this allocation made by the Convenor? Say, if I am a Kidney transplant hospital?

For Kidney allocation, a procedure has been devised and adopted to start the waitlist. The Kidney transplant hospitals were asked to send their Initial List of recipients to the Convenor through online posting on the website during a specified time window that ended on November 30, 2009. Recipients should have been on dialysis for a minimum period of two months at the time of registration. Date of starting dialysis is a key parameter in this Initial List and there should be verifiable proof available for this and there should be solid authentication of this.

Transplant hospitals in the State have been divided into three zones as follows and organ donations arising in a zone will be allocated first within that zone:

North Zone – Chennai and neighbourhood, Vellore

South Zone – Trichy, Madurai, Tirunelveli, Nagercoil

West Zone – Coimbatore, Erode, Salem

What are the prioritization norms for Kidneys?

The first stage of allocation is to the Lists. The norms for this go as follows:

One Kidney (called ‘Local’) goes to the Hospital List of the transplant hospital where the organ donation happens. If the donation takes place in a non-transplant hospital, both Kidneys become Share Kidneys.

Second Kidney (called ‘Share’), if it arises in a Government Hospital, will be allocated in the following order, moving to the next if no match is found in the earlier list:

- Combined Government Hospitals List
- Combined Private Hospitals List
- Government Hospitals outside the State
- Private Hospitals outside the State
- Foreign National in or out of State

Should Share Kidney arise in a Private Hospital, the order will be as follows:

- Combined Government and Private Hospitals List
- Government / Private Hospitals outside the State
- Foreign National in or out of State

The second stage of allocation is to the specific Recipient on the allotted List. Subject to blood group match, this goes as follows:

For Local Kidney that gets allocated to the Donor Hospital List, the hospital’s own priority criteria, as intimated to the Convenor will apply. For Share Kidney, priority will be based on seniority of registration with the Convenor, and where this seniority is the same, seniority of period on dialysis will apply. All those on the Initial List registered on or before November 30, 2009 are treated as having registered simultaneously on that day. This effectively means that for all those in the Initial List, the period on dialysis will determine priority.

Recipients below 10 years of age will have priority to be matched with donors below 10 years. Recipients above the age of sixty can also be registered and will be considered for allocation of kidneys from donors above the age of sixty or of other kidneys not matched or accepted by recipients below the age of sixty. O group recipients will have priority to be matched with O group donors.

Is there any way one can estimate how long a waitlisted patient may have to wait to get a Share Kidney?

Yes, it is feasible for a registered hospital to assess this to a reasonable extent. Please see Annexure 6 for guidance on this.

How will Liver / Heart / Lung be allocated?

Here too the transplant hospitals are to prepare their hospital waitlists for each organ and provide them to the Convenor along with their prioritization criteria in the format specified by him. There will, however, be two kinds of lists – Urgent and Standard.

The criteria for Urgent Liver Transplantation are:

- Hepatic Artery Thrombosis following a liver transplant
- Primary non-function of a graft
- Fulminant hepatic failure

The criteria for Urgent Heart Transplantation are:

- Patients with LVAD – Left Ventricular Assist Device
- Patients with IABP – Intra Aortic Balloon Pump

The hospitals will also keep the Convenor posted of multi-organ failure recipients.

Given the above, the Urgent list of severely ill patients gets the highest priority. As for Standard Lists, organs (liver, heart, and lung) from a Local Donor automatically get allocated to the List of the hospital where the donation arises. These are called Local Organs. If no recipient match is found in the donor hospital or the organs are not taken by that hospital for any other reason, they get into the Share Pool. These Share Organs would get allocated to Standard Hospital Lists by hospital turn. This is done by arranging the participating hospitals in a random order - which order will be revised once in six months – and offering an available Share Liver first to the hospital next in line to the one that took the earlier Share Liver; if it is not taken by that hospital, it will be allotted to the one next in line and so on. If no hospital in the network can take that liver, it will be offered to other state networks feasible. Share Organs donated in a government hospital will be offered first to other government hospitals.

In the event of a hospital (Hospital A) flagging an Urgent List patient for Liver, it will be circulated to other liver transplant hospitals in the network and if there is no dissent, that patient in Hospital A will be allotted the next available Share or Local Liver of same or compatible blood group. If it is a Share organ allotted out of turn to this case, Hospital A will give up its next allocable Local or Share organ of non-marginal quality – of same or any other blood group as decided by the Convenor - to the share pool. If, on the other hand, it is a Local Liver of another hospital (Hospital B) - automatically allocable to that Donor Hospital - that gets diverted to this Urgent List patient of Hospital A, Hospital B will, at that time, specify the blood group of the recompense offer; in this case, the next Local or Share Liver of that blood group (of non-marginal quality) allocable to Hospital A will, instead, get allocated to Hospital B.

Multi organ recipients matched with multi organ donors can get priority over others in the Hospital List in the allocation of Local Organs, subject to the priority norms of that hospital.

When a Share Liver is offered to a hospital, it has to be allocated to a recipient of the same blood group in the Hospital List. Local livers can be allocated to compatible blood groups.

A hospital alerted about a Share Liver offer should accept it only if it is in a position to schedule organ retrieval within 10 hours of alert or 6 hours of brain death certification, whichever is later and should communicate its acceptance of the offer within 45 minutes of offer. A donor hospital finding a Local Liver medically unsuitable for its use, should provide access to at least two more hospitals to evaluate that organ and decide on acceptance; if the organ is rejected after retrieval, it should be made possible for at least one other hospital to evaluate it.

All allocations made to hospitals as described above are made to the Hospital Lists of those hospitals and each hospital should follow the prioritization in its List as communicated earlier to the Convenor. The reasons for any exceptions made to this should be explained to him. Within Hospital Lists, a Liver recipient should have registered for more than 24 hours to qualify.

When an organ is allotted to the hospital list, it is to the Indian nationals on the list. If no match is found for the organ in that hospital, followed by other hospitals in the State and in the Country for Indian nationals, it will then be allotted to foreigners in the hospital list, followed by State and Country lists.

Organ allocation procedures are still being evolved, learning from experience. Liver transplant hospitals need to provide to the Convenor data relating to past and future transplant surgery outcomes in prescribed format – including MELD Scores and mortality on waitlist – so that alternative methods of more patient-centric allocation can be examined.

If I am a non-transplant hospital, what is my role?

You can, of course, become a transplant hospital, if you wish to. See the THO Rules, particularly Rule 9, to see if you qualify. Form 11 of the Rules is the format for applying for registration, but write to the DMS, 7th Floor, DMS Complex, 359, Anna Salai, Teynampet, Chennai- 6, with Rs.300 D/D drawn in favour of “The Director of Medical and Rural Health Services” to get the application form formally.

If you are not a transplant hospital and suspect brain death in a particular case, but do not have the facilities to properly assess or certify brain death, please shift the patient to a nearby transplant hospital for further diagnosis. You can contact the Convenor for guidance in this regard.

How is this entire exercise co-ordinated?

The anchor for this coordination is the Convenor. **Dr J Amalorpavanathan, Reader in Vascular Surgery, Madras Medical College and Vascular Surgeon, Government General Hospital**, holds this position in honorary capacity. He can be contacted at organstransplant@gmail.com or fax 25363141 or phones 25363141, 25305638, 98410 60598. His mailing address is: Convenor, Cadaver Transplant Program, 165 A, Tower Block I, 6th Floor, [Next to Bone Bank], Government General Hospital, Chennai - 600 003, or contact **Ms. Deepika**, Ph- 994027187.

His role is to maintain the waitlists and allocate organs, call meetings of the Advisory Committee, collate data on transplantation and take up awareness generation programs. The detailed steps he would take have already been explained in the narration above.

His effort is supported by the Advisory Committee that has been formed to establish formats and procedures, to oversee compliance with procedures, to ensure stability of functioning of the program and to recommend a Coordinating Body to institutionalize and streamline the program. (The Guidelines for cadaveric transplantation, to supplement the

G.O.s, as approved in the first meeting of the Advisory Committee and amended in subsequent meetings are given in Annexure 1) The members of this Committee are:

- (i) Secretary, Health or his nominee-Chairman
- (ii) Sri P.W.C. Davidar, IAS
- (iii) Convenor, Cadaver Transplant Program, Tamil Nadu
- (iv) Director of Medical Education or representative
- (v) Director of Medical and Rural Health Services or representative
- (vi) Managing Director, Tamil Nadu Medical Services Corporation or representative
- (vii) Managing Director, ELCOT or representative
- (viii) Officer from Department of Finance, Tamil Nadu
- (ix) Transplant team member, Government Stanley Hospital, Chennai
- (x) Transplant team member, Kilpauk Medical College Hospital, Chennai
- (xi) Transplant team member, Government General Hospital, Chennai.
- (xii) One senior police officer of DIG rank or above as nominated by the Director General of Police, Chennai.
- (xiii) Member from MOHAN Foundation, Chennai.
- (xiv) Member from National Network for Organ Sharing, (NNOS), Chennai.
- (xv) Transplant team member, Apollo Hospital, Chennai.
- (xvi) Transplant team member, Christian Medical College Hospital, Vellore.
- (xvii) Transplant team member, Assured Best Care Hospital, Tiruchirappalli.

The Advisory Committee has set up certain Sub-Committees to provide inputs to the Advisory Committee, and to be available for consultation and help in decision making by the CCTP.

The entire structure and norms described above are still evolving and have a long way to go to achieve full results. All participating hospitals have a crucial role to play in this. Please let the Convenor know of improvements or changes you think would make the whole process more effective.

What has been the result so far?

There have been 134 donors in the State during twenty five months ending October 2010; a total of 403 major organs were transplanted, including 253 kidneys. Please see Annexure 7 for more detailed information on two year performance.

This record is highly creditable, but is far lower than what is possible with the existing physical infrastructure. Just five hospitals in the State accounted for more than four fifths of donors. It is the soft infrastructure of creating knowledge of procedures, training of personnel in deceased donor maintenance and transplant coordination and a positive attitude among medical professionals that will make a significant difference.

Please arrange in-hospital awareness generation programs. The Convenor or his representative will be happy to participate. Do keep visiting www.dmrhs.org to get to know of latest statistics and other information.

(Please note that all above is a simplified narration of the key elements of the regulatory and facilitating procedures laid down by the Central and State governments – the THO Act, THO Rules, Government Orders of Tamil Nadu, Guidelines established by the Advisory Committee - as prepared by the National Network for Organ Sharing (NNOS), for the purpose of initial easy understanding. Only the THOA, its Rules, the G.O.s and the Guidelines established by the Advisory Committee are the authentic and comprehensive sources. The procedures continue to evolve based on the Advisory Committee decisions, further G.O.s and amendments to the Act and Rules.)

Annexure 1

Guidelines for Transplant Co-ordination

(As established by the Advisory Committee in its first four meetings)

All private transplant hospitals wishing to join the Tamil Nadu Transplant Network will pay an admission fee of Rs.10, 000/-. There will be no annual fee. The fees will be paid to the Tamil Nadu Medical Services Corporation, who will keep a separate account of funds received and spent or given to the Convenor to meet coordination expenses. No fees are payable by government hospitals. Apart from this, donations to the Cadaver Transplant Programme can also be received and these will go to the same account as above.

All transplant hospitals will appoint a Transplant Coordinator (TC), preferably full time, preferably with social work background. The TC will keep in contact with the Convenor, Cadaver Transplant Program, Tamil Nadu (CCTP) and will provide him full contact particulars of himself / herself and two other medical officers of the hospital who can be contacted any time. The TC will ensure that each transplant team in the hospital makes a list of patients assessed by them as needing organ transplant and posts them online or by email on a regular basis in the format required by the CCTP and will ensure that it is kept constantly updated when the patient information changes. The hospital will ensure that the password access to the registry maintained by the CCTP is restricted to only one or two key persons in the organization and the access is handled with full responsibility and confidentiality.

The TC will keep in touch with the ICUs in the hospital and when a brain death is suspected, will swing into action to organize brain death certification, grief counseling of the relatives, handling police liaison in cases of death by accident, seeking organ donation from the relatives and alerting the CCTP if donation looks feasible. She will also coordinate transfer of relevant patient information to the CCTP and to the recipient hospitals nominated by him and will facilitate all steps till organ retrieval is carried out, post mortem done if needed and the body is handed over to the relatives. It is the responsibility of the TC to ensure that the relatives of the donor are inconvenienced the least and are kept informed all the time.

In the event an organ is allocated by the CCTP to a recipient in the hospital list, the TC, being the first point of contact, will swing into action and assist the transplant team in contacting the recipient patient, organizing the logistics of the surgery and facilitating the transplant team's travel. It is the responsibility of the recipient hospital to ensure that it obtains all needed medical and social information regarding the donor from the donor hospital and assess organ suitability for transplant. It is the responsibility of the recipient hospitals to send teams to the donor hospital to retrieve the organs and preserve them till transplantation.

A private donor hospital is entitled to be reimbursed of all costs incurred by it on the donor cadaver from the time the donor family consents to donate, including assistance in removing, transporting and preserving the organs, as determined by it, subject to a ceiling amount of Rs.75, 000/-. The total cost as above, will be distributed equally on all major organs such as kidney, liver and heart removed from that cadaver by private hospitals,

including organs removed by the donor hospital and the private recipient hospitals of those organs will reimburse their share of the cost to that donor hospital on request made to them by the latter. Government donor hospitals and government recipient hospitals are excluded from this procedure.

Every transplant centre will send a detailed statement to the CCTP immediately (within two days) after each organ donation / transplantation in formats that will be provided by the CCTP. It will also send a monthly statement in a specified format, before the 7th of the next month. It is essential that these statements are sent regularly and on time. Apart from this, transplant hospitals should send to the Convenor detailed reports as asked by him towards collection of data on long term clinical results of transplant surgeries. All communications with the CCTP should preferably be through email.

The CCTP will maintain a recipient registry on computer, programmed to do organ matching and prioritizing based on pre-set criteria. The programme and the systems set up would ensure that the following actions get carried out smoothly. Whenever an online / email addition is made to the list by any hospital, it will be vetted to see if all information are appropriately provided and will then be loaded to the registry list. After each addition or change made by a hospital to its list, it will be sent its updated list by email. The hospital list will carry an identity number for each patient on the list. The full registry will consolidate the kidney lists of all hospitals into three lists – public hospitals list, private hospitals list and combined list. It will hold basic information required for matching and prioritizing and will carry only patient identity numbers, not names. Password to view these lists online will be provided to all participating hospitals.

For liver and heart, only individual hospital lists will be maintained which should be communicated to the CCTP whenever it is updated. Each hospital has to provide the CCTP the prioritization criteria it proposes to adopt when it sends its list the first time and if and when it changes them. Organs retained by a hospital due to cadaver donation within that hospital and liver and heart allotted to another hospital as share organs will be allocated by the hospital itself according to the hospital list maintained by it and according to prioritization criteria determined by it. This process must, however, be transparent and the list and prioritization criteria must be made available to the CCTP. Any deviation from this prioritization must be intimated to him with reasons. When an organ is allotted to the hospital list, it is to the Indian nationals on the list. If no match is found for the organ in that hospital, followed by other hospitals in the State and in the Country for Indian nationals, it will then be allotted to foreigners in the hospital list, followed by State and Country lists. This is to ensure that Indian nationals get due priority over foreigners in case of organ allocation to hospital lists.

When the relatives of a Deceased Donor request that an organ of the Donor be allotted to a near relative of the Donor – as defined in the THOA - suffering from failure of that organ, this may be conceded to by the Convenor, subject to verification by the concerned hospital.

When the CCTP receives information on organ donation from any transplant centre, he would seek the minimum data required for matching and prioritizing and run the information on the registry to decide on the individual recipients most qualified to get the organs, based on the guidelines set in G.O. [Ms] No.287 and further criteria set by the Advisory Committee. In order to minimize delay in organ removal and inconvenience to

the donor family, the CCTP will divide the participating hospitals as belonging to three geographic zones and will prioritise distribution of organs within the donor zone. For the organ/s to be retained in the donor hospital, the hospital will allocate the organs according to the priority criteria it has communicated to the CCTP for its hospital list and should intimate the CCTP the allocation made. The hospital will offer the organ to the first on the list and if, for any reason, it does not work out, will move to the next in the list. Any deviation from this prioritization for any reason must be intimated to the Convenor with reasons therefore. For organs to be shared outside the donor hospital, the CCTP will use the full registry and list the first three recipients. He will then intimate the hospitals where the first choice recipients are registered and will give the hospitals one hour to accept the organ donation. He will simultaneously alert the hospitals concerned with the second choice, and the offer will go to them with a 45 minute deadline, should the first offer be turned down or does not fructify within the allotted time. The CCTP can use his discretion to flexibly adopt these time frames to suit specific circumstances. Should any organ not find a match or not accepted within the state, the CCTP can use his discretion to contact similar coordination agencies in other states and offer the organ to them so that donated organs are fully utilized.

All communications in this regard will be through phone, email or fax as convenient. The CCTP will maintain a summarized record of the interactions. The CCTP will post to all participating hospitals a monthly statement showing the donations made and how the organs were shared, before the 15th of the next month.

The CCTP will use the funds available for the Cadaver Transplant Program held by the Tamil Nadu Medical Services Corporation to pay for outsourced services, to conduct programs, for travel and all other expenses necessary to make the Program a success. He will present at each meeting of the Advisory Committee a summary account of the money spent from the time of the last meeting till then, for approval.

Kidney Allocation Criteria

Organ allocation priority will be based on seniority of period on dialysis for patients registered in the Initial List. Initial List will consist of recipients registered by participating hospitals during a time window to be announced by the Convenor, CTP. For each recipient there should be solid authentication of dialysis start time, which will be verifiable. Any registration made beyond this period will be prioritized on the basis of seniority of wait time on the List.

Other aspects that will govern the allocation of organs, in addition to those specified in G.O. [Ms] No.287, and the Guidelines established by the Advisory Committee are as follows:

- A recipient can be considered for registration on the list, only if she or he has been on dialysis for at least two months.
- Recipients above the age of sixty can also be registered and will be considered for allocation of kidneys from donors above the age of sixty or of other kidneys not matched or accepted by recipients below the age of sixty.
- A recipient below 10 years of age will have priority to be matched with donors below 10 years.

- In blood group matching, O group recipients will have priority to be matched with O group donors.

To enable smooth functioning, the Convenor, CTP, will keep hospitals concerned posted of top five in the wait list in each blood group, who will, in turn, keep the concerned recipients alerted and evaluate their fitness for surgery.

Liver allocation criteria

The following guidelines for liver allocation will be in addition to and will further clarify G.O. (Ms) No. 287 and the other Guidelines established by the Advisory Committee. Liver donated in a hospital and transplanted in the same hospital is described as Local Liver and Liver received from another hospital and transplanted is called Share Liver.

1) Organ allocation by rotation:

Section 5 (ii) (b) of G.O. (Ms) No.287 states that Liver is to be allotted to participating hospitals in turn, when not required for a patient in Urgent category. This provision applies to Liver that is donated in one hospital but not utilized for transplant in that hospital and offered to another hospital, denoted as Share Liver. The turn system for the allocation of such Share Livers is as follows: Participating liver transplant hospitals will be arranged in any particular order – which order will be randomly altered once in six months – and the first offer of a Share Liver will be made to a hospital next in line to the one that used the last Share Liver. If it is not taken by that hospital, it will go to the one next in line and so on. If there is no taker within the state, the Share Liver will be offered outside the state at the discretion of the Convenor. Government hospital will always get the first offer from a government hospital donor

2) Patient-centric organ allocation to be considered for the future: In order to study and arrive at a methodology of more patient-centric organ allocation in future, a comprehensive data on past status and outcome of liver transplant surgeries - particularly MELD scores and mortality on waitlist - and of future cases will be provided by hospitals to be able to analyze and compare likely recipient end results of present method and any other recipient-oriented method.

3) Blood group match
Share Liver has to be matched to the same blood group recipient, except in 'Urgent' cases. Local Liver is exempted from this rule.

4) Rejection of Liver on medical grounds
a hospital turning down a Local or Share Liver on grounds of medical unsuitability should provide access to at least two more hospitals to evaluate that organ and accept or reject. If organ is found unsuitable after retrieval, it should be evaluated by at least one other hospital.

5) Time window for organ acceptance
A hospital offered the Share Liver first should convey in-principle acceptance or otherwise within 45 minutes of offer. The offer should be accepted only if it is possible to arrange the

logistics in such manner as to schedule organ retrieval within 10 hours from time of first intimation or within 6 hours of second certification of brain death, whichever is later.

6) Combined organ transplant

Section 5 (i) of G.O. (Ms) No.287 states that a multi organ recipient takes precedence over all others on a regular waiting list and the Convenor will take appropriate decision on allocation criteria when the situation arises. It is now clarified that whenever a hospital list shows combined transplant requirement to a patient (such as Liver + Kidney), the hospital can allocate to that patient the organs from a donation that arises inside that hospital – denoted as Local Organs - subject to that hospital's prioritization norms. Out of turn allocation of Share Organs to that patient will be considered only if that patient qualifies to be placed in the Urgent List.

7) Allocation to Urgent List

Section 5 (ii) of G.O. (Ms) No.287 states that patients on the Urgent List supersede the standard list and the hospital misses its regular turn on the rota. This provision is further clarified as follows. Whenever a hospital alerts the Convenor that one of its patients is in the Urgent List for Liver, the details will be circulated to all liver transplant hospitals and unless there is dissent, the next available Local or Share Liver of compatible blood group will be allocated to that patient, out of turn. Should that next available Liver happen to be a Local Liver of another hospital, the Convenor can allot it to the Urgent List patient and the recipient hospital of the Urgent List patient will lose its next entitled non-marginal Local or Share Liver - of the same or any other blood group as specified by the donor hospital at the time of giving up its Local Liver for the Urgent List patient – to be allocated to the donor hospital.

8) Out of turn allotment to be balanced

Whenever an out of turn allotment of a Share Organ is made to a hospital, that hospital is obliged to give back to the Share pool its next allotted non-marginal Share or Local organ, whichever arises first, of the same or any other blood group as decided by the Convenor.

Because of the difficulty in providing for all circumstances and the complexities involved in the allotment procedure, the Convenor is authorized to take appropriate decisions to suit specific circumstances, keeping in mind the spirit of these guidelines and the Government Orders.

STEPS FOR TRANSPLANT CO ORDINATORS TO FOLLOW, AS ISSUED BY THE CONVENOR

1] Please familiarize yourself with the operation of the online kidney wait list at the www.tnos.org website by asking for telephone guidance from or personal visit to the Office of the Cadaver Transplant Program.

2] Please update the online kidney waitlist periodically by clicking the 'delete' button if a patient is to be removed from the list permanently for whatever reason, clicking the 'transplanted' button if the patient got transplanted with a kidney allotted through this program. Also click on "Make Inactive" option if the patient is temporarily unavailable for transplant surgery due to

- being temporarily out of station/ not reachable
- being medically unfit for the time
- patient requesting time gap for family or other reasons
- any other reason

Once that patient becomes active again, promptly click on the 'Make Active' button against that name. The patient's priority rank in the List would not change any way because of this process.

3] It is also necessary for you to prepare the Local Hospital List for your patients waiting for transplant of Kidney, Liver or Heart using the spreadsheet blank form you should obtain from the Convenor as email attachment. You should fill all the columns in that form and send back to the Convenor. You need to send to the Convenor a fresh updated List whenever a single change is made to that List at your end.

4] Please keep the top 10 patients in your hospital waitlist in all the blood groups alerted for short notice surgery.

5] As soon as a brain death is identified, immediate intimation should be given to the Convenor so that the recipient hospitals can be kept alerted.

6] Once the Consultants and Surgeons decide the recipient for the cadaver transplant (for local organ) kindly SMS the recipient's details (Name/Age/Sex/Priority Number in their in-house list) to the State Coordinator.

7] The online forms of donor and recipient's details are filled properly in the given format, without mistakes. Single person handling the information is advisable to avoid errors. If you have any difficulty in using the online forms/options, kindly mail us. We will help you.

8] Any change in contact details of transplant hospitals (Change of Consultants / Surgeons / Transplant Coordinators or their phone numbers) should be intimated immediately to the Convenor office.

9] It is mandatory that all mails sent from the Convenor's office should be acknowledged.

10] Conduct in house meetings and awareness programs regarding Cadaver Transplantation in your hospital, Convenor or his representative would be happy to participate and address the gathering.

11] Any suggestions/ queries kindly mail it to organstransplant@gmail.com or contact Ms.Deepika, 9940027187.

Annexure 2

The following Government Orders have been issued by the Health and Family Welfare Department in order to streamline the Cadaver Transplant Program:

Brain death - Declaration of brain death made mandatory in Government Medical College Hospitals in Chennai - Orders Issued.
G.O.(Ms) No.6 Dated: 08.01.2008

Brain death – Declaration of brain death made mandatory in Government Medical College Hospitals in Chennai – Procedure for declaration of brain death – orders issued.
G.O. (Ms) No. 75 Dated: 03.03.2008

Health & Family Welfare Department - Organ Transplant – Authorization Committee Procedures – Additional responsibilities – Detailed instructions – orders issued
G.O. (Ms) No. 175 Dated : 6.6.2008

Health & Family Welfare Department – Organ Transplant – Cadaver Organ Transplant Program - Procedure to be adopted for cadaver transplant by the Government and Private Hospitals approved for organ transplant by the Appropriate Authority – orders issued.
G.O. (Ms) No.287 Dated : 05.09.2008

Health and Family Welfare Department - Organ Transplant - Responsibilities of Transplant centers in hospitals - Detailed instructions - Orders issued.
G.O.(Ms) No.288 Dated:05.09.2008

Health and Family Welfare Department - Non-Transplant centers - Criteria for non-transplant centers to retrieve organs from brain dead persons – Detailed instructions - Orders issued.
G.O.(Ms) No.289 Dated:05.09.2008

Cadaver Transplant Program – Designation of Dr.J.Amalorpavanathan, Reader in Vascular Surgery, Madras Medical College and Vascular Surgeon, Government General Hospital, Chennai as Convenor, Cadaver Transplant Program, Tamil Nadu – Orders – Issued.
G.O.(Ms) No.296 Dated: 16.09.2008

Health and Family Welfare Department - Cadaver Organ transplantation - Post-mortem examination in medico legal cases – Procedure prescribed - Revised Orders Issued

Health and Family Welfare Department-Cadaver Organ transplantation - Participation of Private Hospitals in the State - Compulsory – Orders – Issued.



Brain death - Declaration of brain death made mandatory in Government Medical College Hospitals in Chennai - Orders Issued.

Health and Family Welfare (Z1) Department

G.O.(Ms) No.6

(Thiruvalluvar Aandu - 2038,
Sarvajith, Margazhi Matham -1)

Dated: 08.01.2008

Order:-

It has been brought to the notice of the Government that Brain death is not declared when it has occurred. Further, doubts have arisen in medical circles on the authority by which doctors may declare "Brain Death" whenever required. Several patients who are brain dead have been kept on life support systems in the three Medical College Hospitals in Chennai that could have been utilized by other patients who are not in a similar state and have a better chance of recovery. It is also known that failure to declare brain death even when all the conditions are evident has led to prolonged anxiety for all family members and friends of the patients.

2. Due to the lack of clarity on this issue and the optional nature of the current situation, it is necessary to issue orders making it mandatory to declare "Brain death" and certify it accordingly.

3. The following orders are therefore issued in the matter:-

It is now made mandatory that whenever the medical condition (clinical and medical criteria have been met for) of a patient has reached a brain death stage, brain death certification is to be done by the authorized medical personnel.

4. The above order shall come into force in the three Government Medical College Hospitals in Chennai, viz., Government General Hospital, Government Stanley Hospital, and Government Kilpauk Medical College Hospital (Inclusive of Government Royapettah Hospital) with immediate

effect and shall be considered for expansion in other Government Hospitals in the State in due course.

5. The procedures to be followed for declaring brain death and the authorized personnel for the same will be issued separately.

(By order of the Governor)

V.K.Subburaj
Secretary to
Government

To

The Director of Medical Education,
Chennai - 600 010,
The Dean, Government General Hospital,
Chennai - 600 003,
The Dean, Government Stanley Hospital,
Chennai - 600 001
The Dean, Government Kilpauk Medical College Hospital, Chennai -
600 010.

/forwarded by order /

Section Officer



Abstract

Brain death – Declaration of brain death made mandatory in Government Medical College Hospitals in Chennai – Procedure for declaration of brain death – orders issued.

Health and Family Welfare (Z1) Department

(Thiruvallur Aandu - 2039
Sarvajith, Masi Matham -20)

G.O. (Ms) No. 75

Dated : 03.03.2008

Read :

G.O. (Ms) No. 6, Health and Family Welfare Department Dated 8.1.2008

Order:-

In the Government Order read above, declaration of brain death has been made mandatory in Government Medical College Hospitals in Chennai. In para 5 of the above order, it was decided that the procedures to be followed for declaring brain death and the personnel authorised to certify the same would be issued separately.

2. Whereas the Transplantation of Human Organs Act of 1994 (THO Act) and the Transplantation of Human Organs Rules, 1995 (THO Rules) are the only pieces of legislation available wherein brain death certification procedures have been elaborately laid down, it is hereby decided that the procedures outlined therein will also be adopted as brain death certification procedure in Tamilnadu. This order will also elaborate on the above format to ensure its applicability to the state.

3. Form 8 of the THO Act and Rules as found in the Annexure-I to this order are prescribed as the brain death certification format to be utilised for any given situation requiring certification that a person is dead on account of permanent and irreversible cessation of all functions of the brain stem. The tests prescribed therein and the findings required shall remain the same.

4. According to Form 8 of the said Act and Rules, when such certification is required, there shall be two medical examinations conducted by a team of doctors after a minimum interval of six hours and the findings made based on the tests prescribed therein.

5. One aspect of the above form requires further clarification and this is provided in Annexure-II of this order.

6. According to Form 8 of the above Act and Rules, four Doctors are authorised to certify Brain death and this provision is clarified further.

(A) Doctor No.1 is the 'R.M.P. In charge of the hospital in which brain-stem death has occurred'. Accordingly, the Registered Medical Practitioner in charge of the hospital in which brain-stem death has occurred shall refer to either the Head of the Institution, RMO,

ARMO, Duty RMO or the RMP in charge of the Hospital. (No clearances are required from the Appropriate Authority in this category).

(B) Doctor No. 2 is the R.M.P. (Physicians, Surgeons or Intensivists) nominated from the panel of names approved by the Appropriate authority'. Accordingly, a panel of names shall be sent by the Dean/Medical Superintendent/Medical Director to the Appropriate Authority namely the Director of Medical and Rural Health Services and on approval shall then be utilised as the panel from which a R.M.P. shall be nominated for each brain death certification. Each hospital may determine its own procedure for this duty.

(C) Doctor No.3 is 'Neurologist/Neuro-Surgeon nominated from the panel of names approved by the Appropriate Authority'. Again, a panel of names shall be sent by the Dean/Medical Superintendent/Medical Director to the Appropriate Authority namely the Director of Medical and Rural Health Services and on approval shall then be utilised as the panel from which one specialist as in the category therein shall be nominated for each brain death certification. Each hospital may determine its own procedure for this duty.

(D) Doctor No.4 is the R.M.P. treating the aforesaid person. This does not require any clarification and shall be the R.M.P./ Doctor on duty treating the patient. (No clearances are required from the Appropriate Authority in this category).

Note: i) In the event of lack of authorised personnel in Category 3 above in the hospital concerned, a request may be made to any other member of the panel from another hospital.

ii) The 1st and 2nd Medical examination as defined in Form-8 of the THO rules shall be conducted by category 2 and 3 Doctors from the panel approved by the Appropriate Authority.

7. Although it has been made mandatory for the three Medical College hospitals in Chennai to follow this procedure, the same procedure shall be applicable to all hospitals inclusive of private hospitals which wish to certify Brain Death as and when required. Accordingly, the categories that require for the panel to be approved shall be done so on submission to the Appropriate Authority (Director of Medical and Rural Health Services).

8. The Director of Medical Education and the Director of Medical and Rural Health Services are directed to periodically organise awareness workshops on the provisions of the above order.

(By order of the Governor)

V.K.Subburaj,
Secretary to Government

To

The Director of Medical Education, Chennai 600 010.

The Director of Medical & Rural Health Services, Chennai 600 006.

The Dean, Government General Hospital, Chennai 600 003.

The Dean, Government Stanley Hospital, Chenna-600 001.

The Dean, Government Kilpauk Medical College Hospital, Chennai – 600 010.

/forwarded by order/

Section Officer

Annexure - I
FORM 8

[See rule 4(3)(a) and (b) of the THO Rules 1995]

We, the following members of the Board of medical experts after careful personal examination, hereby certify that Shri/Smt./Km. aged about s/o, d/o, w/o, Shri. resident of is dead on account of permanent and irreversible cessation of all functions of the brain-stem. The tests carried out by us and the findings therein are recorded in the brain-stem death Certificate annexed hereto.

Dated

Signature

1. R.M.P., Incharge of the Hospital in which brain-stem death has occurred.

2. R.M.P., nominated from the panel of names approved by the Appropriate Authority.

3. Neurologist/Neuro-Surgeon nominated from the panel of names approved by the Appropriate Authority.

4. R.M.P., treating the aforesaid deceased person.

BRAIN-STEM DEATH CERTIFICATE

Patient Details:

1. Name of the patient
S.O./D.O/W.O.

Shri/Smt./Km.
Shri.

Sex Age

2. Home address

.....
.....
.....

3. Hospital Number

.....

4. Name and Address of next of kin or person responsible for the patient (if none exists, this must be specified)

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.....
.....

5. Has the patient or next of kin agreed to any transplant?

.....
.....
.....
.....
.....

6. Is this a Police Case?

Yes No

Pre-conditions

1. Diagnosis: Did the patient suffer from any illness or accident that led to irreversible brain damage? Specify details

.....
.....
.....

Date and time of accident/onset of illness

.....

Date and onset of non-responsible coma

.....

2. Findings of board of Medical Experts:

- (i) The following reversible causes of coma have been excluded: - Intoxication (Alcohol)
- Depressant Drugs
- Relaxants (Neuromuscular blocking agents)

First Medical Examination	
1 st	2 nd

Second Medical Examination	
1 st	2 nd

Primary hypothermia

Hypovolaemic shock

Metabolic or

endocrine disorders

Tests for absence or

brain-stem functions

(ii) Coma

(iii) Cessation of spontaneous breathing

- (iv) Pupillary size
- (v) Pupillary light reflexes
- (vi) Doll's head eye movements
- (vii) Corneal reflexes (Both sizes)
- (viii) Motor response in any cranial nerve distribution, any responses to stimulation of face, limb or trunk
- (ix) Gag reflex
- (x) Cough (Tracheal)
- (xi) Eye movements on coloric testing bilaterally
- (xii) Apnoea tests as specified
- (xiii) Were any respiratory movements seen ?

.....

Date and time of first testing :

.....

Date and time of second testing :

.....

This is to certify that the patient has been carefully examined twice after an interval of about six hours and on the basis of findings recorded above.

Shri./Smt./Km. is declared brain-stem dead.

- | | |
|--|--|
| 1. Medical Administrator Incharge
of the hospital | 2. Authorised Specialist. |
| 3. Neurologist/Neuro-Surgeon | 4. Medical Officer treating the patient. |

- NB. I. The minimum time interval between the first testing and second testing will be six hours.
- II. No. 2 and No. 3 will be co-opted by the Administrator In charge of the hospital from the Panel of experts approved by the appropriate authority.

ANNEXURE - II

Guidelines for Apnoea Tests:

Patient should have a temperature of more than 35° centigrade euvolemic and with Systolic pressure \geq 90 mm of Hg.

- i. The first Apnoea test should be performed only after 4 hours of Coma associated with absence of brain stem reflexes. In the case of Anoxic brain damage, this period should be extended to 12 hours.
- ii. The Physician involved in certifying Brain death shall be present during Ventilator removal to attest the presence of apnoea if found.
- iii. Ventilator manipulation is performed to raise the PaCo₂ \geq 40 mmHg.
- iv. The patient should be hyper oxygenated with 100% oxygen for 15 minutes, while still on the ventilator, prior to the apnoea test.
- v. Either a blood gas or trending of ETCO₂ should be used to determine the adequacy of the baseline prior to the test. SPO₂ should be monitored during apnoea test.
- vi. Place the patient on 100% oxygen through a tracheal catheter with the tip towards the end of the tube with a continuous 6L/min O₂ flow.
- vii. The patient is taken off the ventilator in the presence of the physician certifying brain death. The patient is kept off the Ventilator for a variable period of time (usually 3 to 8 minutes) to allow the PaCo₂ to rise \geq 55 mmHg or \geq 15 mmHg over baseline. During this time the patient is observed for respiratory movements.
- viii. Test interpretations;
 - a. Positive test – implying apnea despite adequate stimulation
 - i. Patient remains apneic, without respiratory movements
 - ii. PaCo₂ is \geq 55 mmHg or \geq 15 mmHg from baseline
 - b. Negative test – Implying apnea is not present
 - i. Respiratory efforts noted at any time during the test
 - c. Indeterminate test
 - i. - PaCo₂ < 55 mm Hg or there is less than 15 mm Hg increase over baseline.
 - d. Indeterminate tests can either be repeated or another confirmatory test utilized.
- ix. Apnoea test should be aborted if the patient develops hypotension, or significant cardiac arrhythmias.
- x. These norms will vary for patients less than 12 years and patients with major chest trauma.

ABSTRACT

Health & Family Welfare Department - Organ Transplant – Authorization Committee Procedures – Additional responsibilities – Detailed instructions – orders issued

----- Health
and Family Welfare (Z1) Department

Thiruvalluvar Aandu, 2039
Vaigasi - 24

G.O. (Ms) No. 175

Dated : 6.6.2008

Read :

1. G.O. (Ms) No. 287 Health and Family Welfare Department
Dated 5.5.1995.
2. G.O.(Ms) No.341 Health and Family Welfare Department dated
29.10.2003,
3. G.O.(Ms) No.330, Health and Family Welfare Department dated
10.9.2007.

Order:-

In keeping with the Transplantation of Human Organs Act 1994, the authorization committee has been constituted/ expanded in the Government Orders read above. Accordingly, the authorization committee has functioned over the years and is involved in screening the donors who are not near relatives of the recipients. In order to streamline the functioning of the authorization committees and make it more effective, the following orders are issued.

2. (a) In the case of records to be submitted by the donor and the prospective recipient, proof of residence with photograph shall be submitted having been duly certified by local revenue authorities.

(b) In the event of submission of false records, criminal cases should be filed against the donor and/ or recipient (in case of minors the parents or guardians signing the forms) submitting it. The authorization committee shall recommend to the appropriate authority to file a criminal case as and when the situation arises of false records being submitted.

(c) The authorization committee is also permitted to refer doubtful cases to the police or revenue department for further enquiry.

3. Considering that some donors / recipients are known to contradict earlier statements made before the authorization committee, all authorization committee sittings shall be video graphed.

4. Considering that doubts are raised about relationship claims made by some foreign nationals (who are not Indian citizens), all such donors/recipients shall appear before the authorization committee with relevant records.

5. The current practice of the authorization committee permitting a change in the hospital chosen by the recipient for transplant surgery shall continue. Considering that the patient's convenience is of primary importance, the authorization committee shall issue a fresh permission letter to the second hospital without insisting on No Objection Certificate from the previous hospital. Personal appearance of donor or recipient will not be necessary.

6. The authorization committee shall ensure that clearances and rejections are uploaded on the website maintained for the purpose on the same day on which sitting was held.

7. A donor who is rejected by the Authorization committee shall be considered ineligible to appear again.

8. Considering that transplant hospitals wish to benefit from counseling professionals and the need for professional counseling being provided to live donors, the authorization committee is authorized to give recognition (certification) to counseling institutes in the State to provide additional counseling support to live donors.

9. Any form of paired donor exchange between near relatives shall necessarily be processed by the authorization committee in order to ensure that the arrangement is genuine.

10. In case of living donor who is not a near relative of the recipient, the onus of responsibility in determining the motive of the donor to be that of affection or attachment towards the recipient or for any other special reason (Section 9 (3) of the Transplantation of Human Organs Act 1994), shall be solely that of the authorization committee.

(BY ORDER OF THE GOVERNOR)

V.K.SUBBURAJ,
SECRETARY TO GOVERNMENT

To
The Chairman, Authorization Committee /
Director of Medical Education, Chennai - 600 010
The Chairman, Authorization Committee /
The Dean, Coimbatore Medical College, Coimbatore. The
Chairman, Authorization Committee /
The Dean, Madurai Medical College, Madurai,
Copy to: The Director of Medical & Rural Health Services,
Chennai 600 006.

/FORWARDED BY ORDER/

Section Officer



ABSTRACT

Health & Family Welfare Department – Organ Transplant – Cadaver Organ Transplant Program - Procedure to be adopted for cadaver transplant by the Government and Private Hospitals approved for organ transplant by the Appropriate Authority – orders issued.

HEALTH AND FAMILY WELFARE (Z1) DEPARTMENT

G.O. (Ms) No.287

Thiruvalluvar Aandu 2039
Aavani-20
Dated : 05.09.2008
Read :

1. G.O. (Ms) No. 6, Health and Family Welfare Department
Dated 8.1.2008.
2. G.O. (Ms) No. 75 Health and Family Welfare Department
Dated 3.3.2008.

ORDER:-

Considering the large number of patients who are suffering on account of serious organ ailments ranging from heart, liver, kidney etc and could otherwise lead healthy lives if they had the opportunity to have transplant surgery and also as there is a need for streamlining the procedures for cadaver transplants in Government and private hospitals, the Government have analysed the suggestions and opinions brought forward by medical professionals related to this field and the combined opinion of the Director of Medical and Rural Health Services and Director of Medical Education and issue the following orders.

2. All hospitals, approved for transplantation of human organs, and who are willing to participate in the arrangements for cadaver organ transplant program as dictated by this Government Order shall indicate their willingness to the convenor, cadaver transplant program, Tamil Nadu. All participating hospitals will upload details of their waiting list of prospective cadaver organ recipients through an online form to a computer database that will be maintained by the Transplant Coordinator of the Government General Hospital,

Chennai. (hereinafter referred to as Convenor, Cadaver Transplant Program, Tamil Nadu) Assistance for the maintenance of the web-based application may be had from NGO's working for the cause of organ donation.

3. The database will maintain prioritization lists for
 - (i) each hospital
 - (ii) for all Government hospitals combined
 - (iii) for all private hospitals combined and
 - (iv) for Government plus private hospitals combined, based on preset criteria determined in this order.

4. When the family of the brain dead patient is willing to donate his/her organ(s) to benefit others, the following procedures shall be strictly adhered to:-

- (i) The procedures in declaring brain death shall be adhered to as laid out in the Government Order second read above.
- (ii) Form 6 as laid out in the Transplantation of Human Organs Rules, 1995 shall duly be signed by the person(s) in possession of the brain dead patient and in the case of children below the age of eighteen years, the appropriate form namely Form 9 of the Transplantation of Human Organs Rules, 1995 requires to be signed by the persons concerned before organ retrieval.
- (iii) Organ(s) retrieval shall not be carried out on a brain dead patient merely due to an earlier declaration by the said patient in Form 5 of the Transplantation of Human Organs Rules, 1995. While such a declaration shall presuppose the previous intentions of the brain dead patient to donate his/her organ(s), consent in Form 6 of the Transplantation of Human Organs Rules, 1995, is necessary to continue with the process of organ retrieval.
- (iv) Each hospital should have its own waiting list for each organ, which will include the date of registration. The criteria as well as the prioritized waitlist, continually updated, should be made available online to the Convenor, Cadaver Transplant program, Tamil Nadu. Some hospitals may prefer date of registration. Exceptions to the already notified criteria must be substantiated with reasons to the Convenor, Cadaver Transplant program, Tamil Nadu when a request is made otherwise. The decision of the Convenor, Cadaver Transplant Program, Tamil Nadu is final.
- (v) Any individual needing organ transplant through cadaver donation can be registered through only one hospital at a given time. She or he is free to change the registration to any other transplant

hospital, but the original date of registration will continue to apply for purposes of prioritization of organ allocation.

5. Following the above criteria for allocation, the organ(s) of the brain dead patient shall be shared in the following order, based on the respective prioritization list.

(i) If there is a patient who is to be a multi organ recipient and a matching organ donor is available, then the multi organ recipient takes precedence over all others on the regular waiting list. The Convenor, Cadaver Transplant program, Tamil Nadu will take the appropriate decision regarding allocation criteria when such a situation arises.

(ii) Considering the peculiar nature of certain liver ailments, a provision is made, which is as follows:

Potential liver recipients in hospitals are to be listed in one of the two categories namely 'urgent' or 'standard'.

(a) URGENT: Those on the urgent list are those who have:

- (i) Hepatic Artery Thrombosis following a liver transplant. (ii) Primary Non function of a graft
- (iii) Fulminant hepatic failure.

These conditions do not require a waiting time on the list.

(b) STANDARD: This list refers to all patients who need a liver transplant but do not fulfill criteria for urgent listing. Patients on the standard list have to be registered for more than 24 hours to be listed in this category. The Liver is to be allotted to participating hospitals in turn. *Note: Patients on the urgent list supersede the standard list and the hospital misses its regular turn on the rota.*

(iii) Similarly, potential heart recipients in hospitals are to be listed in one of the two categories namely 'urgent' or 'standard'.

(a) URGENT:

- (i) Patients with Left Ventricular Assist Device (LVAD). (ii) Followed by patients with Intraaortic Balloon Pump (IABP)

(b) STANDARD: Sick, but stable patients waiting at home for a heart transplant.

A Heart is to be allotted to participating hospitals in turn.

(iv) Likewise for lungs, prioritization would be made according to the urgency of transplant and allotted to participating hospitals in turn.

(v) For kidneys no out of turn allocation would be permitted and the sharing criteria in the following para shall be followed.

6. Sharing of Organs for waitlisted recipients, retrieved from cadaver donors in Government Institutions:

(i) First priority to the list of the Government Hospital where the deceased donor is located, for liver, heart and one kidney. The other kidney would be allocated to the general pool in the priority sequence as listed below.

(ii) Second priority to the combined Government Hospitals list

(iii) Third priority to the combined Private Hospitals list

(iv) Fourth priority to Government Hospitals outside the State, (in order to maximize organ utilization)-provided earlier information and such a request has been registered with the Advisory committee / Convenor, Cadaver Transplant Program, Tamil Nadu.

(v) Fifth priority to Private Hospitals outside the State (in order to maximize organ utilization) provided earlier information and such a request has been registered with the Advisory committee/ Convenor, Cadaver Transplant Program, Tamil Nadu.

(vi) Finally, if the organ(s) remains unutilized by the above criteria, it may be offered to a foreign national registered in a Government or Private hospital within and then outside state.

(This is to ensure that there is no wastage of organs donated)

7. Sharing of Organs for waitlisted recipients retrieved from cadaver donors in Private Hospitals, which are transplant centers.

(i) First priority to the list within the Private Hospital where the deceased donor is located, for liver, heart and one kidney. The other kidney would be allocated to the general pool in the priority sequence as listed below.

(ii) Second priority to the combined list of Government and Private Hospitals.

(iii) Third priority to Government / private hospitals outside the state, (in order to maximize organ utilization) provided earlier information and such a request has been registered with the Advisory committee / Convenor, Cadaver Transplant Program, Tamil Nadu.

(iv) Finally, if the organ(s) remains unutilized by the above criteria, it may be offered to a foreign national registered in Government or private hospital within and then outside the state, provided earlier information and such a request has been registered with the Advisory committee /Convenor, Cadaver Transplant Program, Tamil Nadu.

8. Whenever a deceased donor becomes available in a hospital, the concerned hospital shall contact the Transplant Coordinator or a member of his team at the Government General Hospital, Chennai who will then make allocations based on the above. MOHAN Foundation and National Network for Organ Sharing, (NNOS), NGO's promoting organ transplantation may assist the Transplant Coordinator, Government General Hospital, Chennai to facilitate this arrangement and ensure that most number of cadaver organs donated are utilized to benefit organ failure patients.

9. Considering that a number of practical issues are involved such as

- (i) establishing formats and procedures for recipient listing, organ allocation and transfer
- (ii) coordination between hospitals where donor / recipient are located
- (iii) working towards a coordinating body that would be institutionalized and fine-tuning identification criteria to determine the beneficiaries-
- (iv) Proposing policy initiatives from time to time.
- (v) Need for watching the working of the cadaver organ transplantation program,

the Government have decided to form an Advisory committee that would address the above issues and ensure stability in functioning of the cadaver organ transplant program

10. This Advisory committee shall be headed by the Secretary, Health or his nominee as Chairman and the committee shall consist of:

- (i) Secretary, Health or his nominee-Chairman
- (ii) Convenor, Cadaver Organ Transplant Program, Tamil Nadu (i.e Transplant Co-ordinator, Government General Hospital, Chennai.)
- (iii) Director of Medical Education or preventative
- (iv) Director of Medical and Rural Health Services or representative
- (v) Transplant team member, Government Stanley Hospital, Chennai
- (vi) Transplant team member, Kilpauk Medical College Hospital, Chennai.
- (vii) Transplant team member, Government General Hospital. Chennai. (viii) One senior police officer of DIG rank or above as nominated by the Director General of Police, Chennai.
- (ix) Member from MOHAN Foundation, Chennai.
- (x) Member from National Network for Organ Sharing, (NNOS) Chennai.
- (xi) One transplant team member from three different hospitals that currently have largest cadaver donation experience.

The Advisory committee shall in turn nominate four sub-committees to assist in its functioning for

- (i) Liver
- (ii) heart
- (iii) kidney
- (iv) other organs- to determine the severity of illness for listing a patient for transplant.

11. The Advisory committee shall also propose within three to six months to Government the Coordinating body that needs to be formed and institutionalized to periodically give inputs on organ sharing and allocation and to further-streamline the program.

(BY ORDER OF THE GOVERNOR)

V.K.SUBBURAJ,
PRINCIPAL SECRETARY TO GOVERNMENT

To

All Registered Transplant Hospitals,
through the Director of Medical and
Rural Health Services, Chennai - 600 006.

The Director of Medical & Rural Health Services, Chennai 600 006. The Director
of Medical Education, Chennai 600 010.

The Dean, Government General Hospital, Chennai 600 003. The Dean,
Government Stanley Hospital, Chenna-600 001. The Dean, Government
Kilpauk Medical College Hospital, Chennai – 600 010.

The Transplant Co-ordinator, Government General Hospital, Chennai -
600 003.

The Director General of Police, Chennai - 600 004. Copy to:

The Senior P.A. to Minister for Health, Chennai - 600 009. The P.S. to
Secretary to Government,

Health and Family Welfare Department, Chennai - 600 009.

/FORWARDED BY ORDER /

SECTION OFFICER



ABSTRACT

Health and Family Welfare Department - Organ Transplant - Responsibilities of Transplant centers in hospitals - Detailed instructions - Orders issued.

Health and Family Welfare (Z1) Department

G.O.(Ms) No.288

Thiruvalluvar Aandu 2039

Aavani-20

Dated:05.09.2008

Read:

(1) G.O.(Ms) No. 286 Health and Family Welfare Department, dated 5.5.1995. (2) G.O.(Ms) No. 287 Health and Family Welfare Department, dated 5.5.1995. (3) G.O.(Ms) No. 341 Health and Family Welfare Department, dated 29.10.2003.

Order:-

The Government is committed to streamlining the procedures for Organ Transplant in Tamil Nadu. Being aware that a large number of patients are awaiting organ transplant and are dependent on authorized transplant centers, several orders have been issued including formation of the Appropriate Authority, functioning of Authorization Committee and so on.

It is now felt that in the current scenario where more hospitals are being registered as transplant centers, it becomes necessary to ensure that transparency, accountability, patient well being and quality care are adequately taken care of. Also, considering the fact that cadaver donation is done with altruistic motives and in a generous charitable manner as a willing contribution to society, it is necessary that cadaver donation be governed by transparency on all fronts to ensure that the sentiments of the donor's relatives are adequately respected. Hence, it is considered necessary that a certain degree of accountability is also insisted upon. Considering this, the following orders regarding further responsibilities of registered transplant centers are issued.

2. All transplant centers shall maintain all transplant surgery records as required in the Act and Government orders for a minimum period of ten years.

3. All transplant centre hospitals shall ensure the availability of a counseling department / wing to whom the task of counseling the individuals involved in organ transplant is entrusted.

This counseling department / wing should be staffed with personnel who are adequately trained. The assistance of

NGOs professionally involved in counseling may be secured. In the case of non near relative live donors, the counseling department may assist in ensuring that there is no element of coercion or other pressure exerted on the donor and also assist in provision of post operative counseling.

4. Each transplant centre shall designate a transplant coordinator in the hospital, who may be in-house on account of interest / expertise and their role may be defined by the hospital concerned. Transplant coordinators shall play the coordinating role in all matters relating to organ transplant on behalf of the hospital that they represent.

5. A transplant centre hospital shall not reveal the identity or attract any form of media publicity earlier than the date of discharge of recipients. Even after discharge, while the positive aspects of organ donation may be highlighted to promote the cause of organ donation, neither should the details of the recipient nor should the ethics of the medical profession towards attracting publicity be compromised or violated in any manner.

6. In order to ensure transparency and accountability for the reason mentioned above, all transplant centre hospitals that wish to benefit from the cadaver transplant program are required to display the approximate range of cost of a transplant surgery by specifying the organ type on the website of the hospital and the website designated for this purpose by the Health Department.

(BY ORDER OF THE GOVERNOR)

V.K.SUBBURA
J,
PRINCIPAL SECRETARY TO
GOVERNMENT

To
All Registered Transplant Hospitals,
through the Director of Medical & Rural Health Services, Chennai 600 006. The
Director of Medical & Rural Health Services, Chennai 600 006.
The Director of Medical Education, Chennai 600 010. Copy to:
The Dean, Government General Hospital, Chennai 600 003. The Dean,
Government Stanley Hospital, Chenna-600 001.
The Dean, Government Kilpauk Medical College Hospital, Chennai – 600 010.
The Senior P.A. to Minister for Health, Chennai - 600 009. The
P.S. to Secretary to Government,
Health and Family Welfare Department, Chennai - 600 009.

/FORWARDED BY ORDER /

SECTION OFFICER



ABSTRACT

Health and Family Welfare Department - Non-Transplant centers - Criteria for non-transplant centers to retrieve organs from brain dead persons - Detailed instructions - Orders issued.

Health and Family Welfare (Z1) Department

Thiruvalluvar Aandu 2039

Aavani-20

Dated:05.09.2008

Read:

G.O.(Ms) No.289

- 1) G.O.(Ms) No.6, Health and Family Welfare Department dated 8.1.2008.
- 2) G.O.(Ms) No.75 Health and Family Welfare Department, dated 3.3.2008.
- 3) G.O.(Ms) No. 287 Health and Family Welfare department, dated. 5,9,2008.

Order:

The successes of organ transplantation and it being the only treatment for end stage organ disease has led to its widespread application. Aware of the life saving potential of organ transplantation, the Government is committed to streamlining the procedures for co-ordinating organ transplantation in Tamil Nadu. In the light of the current situation of availability of donor organs not meeting the need for them, leading to a severe shortage of available donor organs, efficacious donor management and meticulous co-ordination is crucial in maintaining excellent outcomes in organ transplantation.

There is, at present, no established procedure or guideline to deal with situations that arise when brain deaths occur in hospitals in the state that are not registered under The Transplantation of Human Organs Act,1994 (THO Act) even when the families of the brain dead persons wish or consent to donate the organs of their deceased family member. It is therefore imperative to permit organs to be retrieved when there is a willingness to donate organs at those centers which have the facilities to maintain brain dead deceased donors, so that more lives of organ failure patients can be saved. Considering the fact that a large number of brain deaths occur in non-transplant hospitals the Appropriate Authority shall take the initiative to register those hospitals that fulfill the following conditions as "Non Transplant Organ Retrieval Centers".

The following orders are issued in the matter:-

2. The Appropriate Authority shall register all hospitals in the state that have a minimum of 25 beds along with Operation Theatre and Intensive Care Unit as Non Transplant Organ Retrieval Centers (NTORCs). These hospitals are permitted to certify brain death as per the procedures stipulated in the Government Order Second read above and thereafter organ retrieval for therapeutic purposes, but are not permitted to perform actual transplantation of human organs.

3. The procedures stipulated in the Government Order second read above to be followed by three Government hospitals and other private hospitals registered with the Appropriate Authority, for certifying brain death as per the Transplantation of Human Organs Act, in those hospitals, will apply for brain death certification in NTORCs as well, in the event of a family of brain dead person consenting to organ donation. NTORCs can utilize the services of any medical professional authorized in the Government order second read above, for certification by Doctors No.2 and 3 as specified in the said Government Order.

4. Any NTORC can take assistance and support from any hospital registered with the Appropriate Authority as a transplant center for maintaining the brain dead person in stable condition until organ retrieval is carried out.

5. Whenever a brain death occurs in an NTORC and the deceased person's family consents to organ donation, the NTORC should contact the Transplant Coordinator, at Government General Hospital, Chennai for organ allocation as per norms.

6. The organs shall be allocated following the prioritization norms as established for organs located in the Government hospitals if the concerned NTORC is a Government hospital and the prioritization norms as established for organs located in private hospitals if the concerned NTORC is a private hospital detailed in the Government Order third read above.

7. All other procedures for procedures for cadaveric organ donation and organ retrieval as specified in the Transplantation of Human Organs Act and Rules and other relevant Government Orders would apply to NTORCs as well.

(BY ORDER OF THE GOVERNOR)

V.K.SUBBURAJ,
PRINCIPAL SECRETARY TO
GOVERNMENT

To

The Director of Medical & Rural Health Services, Chennai 600 006. The
Director of Medical Education, Chennai 600 010.

The Dean, Government General Hospital, Chennai 600 003. The Dean,
Government Stanley Hospital, Chennai-600 001.

The Dean, Government Kilpauk Medical College Hospital, Chennai – 600 010. The
Transplant Co-ordinator, Government General Hospital, Chennai - 600 003. Copy to: The
Senior P.A. to Minister for Health, Chennai - 600 009.

The P.S. to Secretary to Government,
Health and Family Welfare Department, Chennai - 600 009.

/FORWARDED BY ORDER /

SECTION OFFICER



ABSTRACT

Cadaver Transplant Program – Designation of Dr.J.Amalorpavanathan, Reader in Vascular Surgery, Madras Medical College and Vascular Surgeon, Government General Hospital, Chennai as Convenor, Cadaver Transplant Program, Tamil Nadu – Orders – Issued.

HEALTH AND FAMILY WELFARE (Z1) DEPARTMENT

Thiruvalluvar Aandu 2039

Aavani-31

G.O.(Ms) No.296

Dated: 16.09.2008

Read:

G.O.(Ms) No.287, Health and Family Welfare Department, dated
5.09.2008.

ORDER:

In the Government Order read above, a program has been formulated for cadaver organ transplant in the State and a detailed procedure prescribed for cadaver transplant in Government and Private Hospitals approved for organ transplant by the Appropriate Authority.

2. In the above Government Order, the central responsibility for co-ordination of all activities relating to the program has been laid on the Convenor, Cadaver Transplant Program, Tamil Nadu. Hence, the Government have decided to designate a Senior Medical Officer as the Convenor, Cadaver Transplant Program, Tamil Nadu to co-ordinate all activities relating to the program.

3. Accordingly, Dr.J.Amalorpavanathan, Reader in Vascular Surgery, Madras Medical College and Vascular Surgeon, Government General Hospital, Chennai, who is already functioning as transplant co-ordinator in Government General Hospital, Chennai is designated as Convenor, Cadaver Transplant Program, Tamil Nadu for co-ordinating all activities relating cadaver transplant program in the State.

4. The following shall be the duties and responsibilities of the Convenor, Cadaver Transplant Program, Tamil Nadu:-

- i) This is a purely honorary post. No pay or allowances are permissible for this post. Dr. J. Amalorpavanathan will perform the duties of Convenor, Cadaver Transplant Program, in addition to his normal duties as Reader

in Vascular Surgery, Madras Medical College and Vascular Surgeon, Government General Hospital, Chennai. He shall report to the Government on all activities relating to Cadaver Transplantation;

- ii) He will design and maintain a computerised waitlist of all the potential organ recipients for Heart, Lung, Liver and Kidneys as received from the participating Hospitals of the State. When organs become available for sharing, he shall allocate them to the participating Hospitals in accordance with the guidelines issued by the Government for this purpose;
- iii) He will convene the meeting of the Advisory Committee once in two months or more frequently as needed to take guidance on the detailed functioning of State-level transplant coordination within the framework of the relevant Government Orders and shall forward the minutes of the meeting to the Government for further action, if needed;
- iv) He will seek and receive status reports from all the participating Hospitals on brain death occurrences and on transplant activities during each month and their outcomes. He shall in turn, send to the Government every month a consolidated status report on the cadaver transplantations that took place during the course of the month;
- v) If any violations of established rules and guidelines are found on the part any participating Hospital, he shall report the same to the Advisory Committee and forward their recommendations to the Government. The Government shall decide on suitable action in such cases;
- vi) He will also coordinate and undertake, with guidance from the Advisory Committee, awareness generation, knowledge development and motivation programmes for all players involved in brain death certification and organ transplantation among the participating Hospitals and for the general public in order to increase the quantum of organ donations;
- vii) Dr. J. Amalorpavanathan shall not address the media without the prior permission of the Government. Press statements should be released only after clearance from the Government.

5. For purposes of performing his duties, Dr.J.Amalorpavanathan shall be allotted a room in one of the Tower Blocks in Government General Hospital, Chennai. He shall be provided with a computer with internet connection as well as a landline telephone with fax facilities. He may be allowed to use one Clerk- cum-Typist from the Government General Hospital for maintaining the records. He shall be allowed to choose two Medical Assistants from the Hospital, who are committed to cadaveric transplantation and who are prepared to work on a purely honorary basis. He shall be allowed to use the Hospital vehicle in times of emergencies and at odd hours.

(BY ORDER OF THE

GOVERNOR)

V.K.SUBBURAJ

PRINCIPAL SECRETARY TO
GOVERNMENT

To

The Director of Medical Education, Chennai-600 010.

The Dean, Government General Hospital, Chennai-600 003. (to provide the facilities detailed in para 5 of the Government Order to the Convenor, Cadaver Transplant Program, Tamil Nadu)

Dr.J.Amalorpavanathan, Reader

in Vascular Surgery,

Madras Medical College and Vascular Surgeon,

Government General Hospital,

Chennai-600 003. (through the Dean, Government General Hospital, Chennai - 600 003)

Copy to:

The Director of Medical and Rural Health Services, Chennai-600 006. The Senior

Personal Assistant to Minister (Health), Chennai-600 009. The Private Secretary

to Principal Secretary to Government,

Health and Family Welfare Department, Chennai-600 009, SF/SCs

/FORWARDED BY ORDER /

SECTION OFFICER



ABSTRACT

Health and Family Welfare Department - Cadaver Organ transplantation - Post-mortem examination in medico legal cases – Procedure prescribed - Revised Orders Issued.

Health and Family Welfare (Z1) Department

G.O. (Ms) No:86

Dated : 26.02.2011

Thiruvalluvar Aandu: 2042

Masi: 14.

Read

G.O.Ms.No.259, Health and Family Welfare (Z1) Department, Dated
14.09.2010

-:o0o:-

ORDER:-

The Government of Tamil Nadu have revamped the methodologies and issued several orders, streamlining the procedures for "Cadaver Organ Transplantation", an attempt to give "life" a new lease after death. Many of the cadaver organ donors are victims of road traffic accidents or other unnatural deaths, which are Medico-Legal cases and necessitate police inquest followed by post-mortem examination.

2. Sections 4 and 6 of the Transplantation of Human Organs Act, 1994 (Central Act 42 of 1994) outline the need for procedural clearances that are required to be made prior to organ retrieval from a person who is brain dead and whose body may be required for post-mortem examination, it being a medico-legal case. Currently the procedure required to do post-mortem in such cases has proved to be a major impediment in popularizing cadaver organ donation. Therefore in the Government Order read above, orders were issued devising certain procedures for facilitation of organ transplantation in Medico-legal cases.

3. A State level workshop was held at Government General Hospital, Chennai on 21st October 2010 regarding further streamlining of the Cadaver Organ Transplant programme (COTP) in Tamil Nadu and certain Modifications were proposed to facilitate implementation of the said programme. It was viewed that incorporation of certain modifications would create a better environment for promoting organ donation and comply the procedural formalities without much difficulty.

4. The Government have examined the modifications and decided to issue modified orders to the Government Order read above by incorporating the modifications suggested in the workshop held at 21.10.2010 at Government General Hospital, Chennai, which are as

below.

- (i) As and when a suspected brain-death takes place, the authorized doctors shall conduct the first brain stem death test as prescribed in G.O. (Ms) No.75, Health and Family Welfare Department, dated 03.03.2008.
- (ii) Should this first test prove positive, the near relatives namely spouse, son, daughter, father, mother, brother or sister of the patient (potential organ donor) shall be consulted and their consent would be sought for organ donation.
- (iii) After consent is obtained from the near relatives of the patient, the Investigation Officer of the medico-legal case concerned shall immediately be requested by the Transplant hospital concerned, in Form - I annexed to this Order, to come to the hospital, in order to expedite the conduct of the inquest, through the police outpost or designated police station of the hospital.
- (iv) The second brain-stem death test on the potential organ donor shall then be carried out according to the Transplantation of Human Organs Rules, 1995 and Form 8 of the said Rules (as in Annexure I of G.O. (Ms) No.75, Health and Family Welfare Department, dated 3.3.2008), will be signed by the authorized doctors, and this shall be independent of the other inquest formalities.
- (v) On receipt of 'Death Intimation' along with Form 6 and Form 8 of the said Rules, the Investigation Officer shall conduct the inquest and determine whether a post-mortem is required. If the post-mortem examination is not required, then the Investigating Officer shall inform the near relatives of the potential organ donor and accordingly the organ retrieval may take place.
- (vi) In case the Investigating Officer decides that a post-mortem is needed, he shall submit:-
 - a) a requisition for conducting the post-mortem;
 - b) 'Organ functional Status Certificate' signed by any one of the doctors authorized by the medical Superintendent in the Form II annexed to this order.
 - c) Copies of Form 6 and Form 8 of the said Rules, to the Medical Officer who will conduct the post-mortem examination.
- (vii) The medical officer who will conduct the post-mortem shall then authorize the organ retrieval, as per section 6 of the Transplantation of Human Organs Act 1994, in Form - III annexed to this order.
- (viii) The organ retrieval shall take place, following which the post-mortem shall be conducted by the Medical Officer designated to do the postmortem. Any duly authorized Transplant hospital (Government or Private) will utilize, for the purpose of post-mortem, the services of the Medical Officer(s) from the Forensic Medicine Department of the Government Medical Colleges or any other qualified Forensic Medicine Expert(s) or any Government medical Officer(s) or Pathologists posted in the Forensic Medicine department or any Government Medical Officer (serving or retired) who has/have had experience in post-mortem work.

After completion of the post-mortem, the body shall be handed over to the Police who shall then complete the necessary procedures.

- (ix) A diagrammatic presentation to facilitate understanding of the steps involved in the above procedures is annexed to this order.

The conduct of post-mortem in the above procedure will be done by qualified persons as contemplated in section 174 (3) of the Code of Criminal Procedure, 1973 (Central Act 2 of 1974).

This order issues with the concurrence of Home Department vide its U.O. No.1228/POI-VII/201 1, dated 21.02.2011.

(BY ORDER OF THE GOVERNOR)

V.K.SUBBURAJ,
PRINCIPAL SECRETARY TO GOVERNMENT

To

The Director of Medical Education, Chennai - 10.

The Director of Medical and Rural Health Services, Chennai - 6.

The Dean, Government General Hospital, Chennai - 3.

The Dean, Government Stanley Hospital Chennai - 1.

The Dean, Government Kilpauk Medical College Hospital, Chennai -10. \

Copy to:-

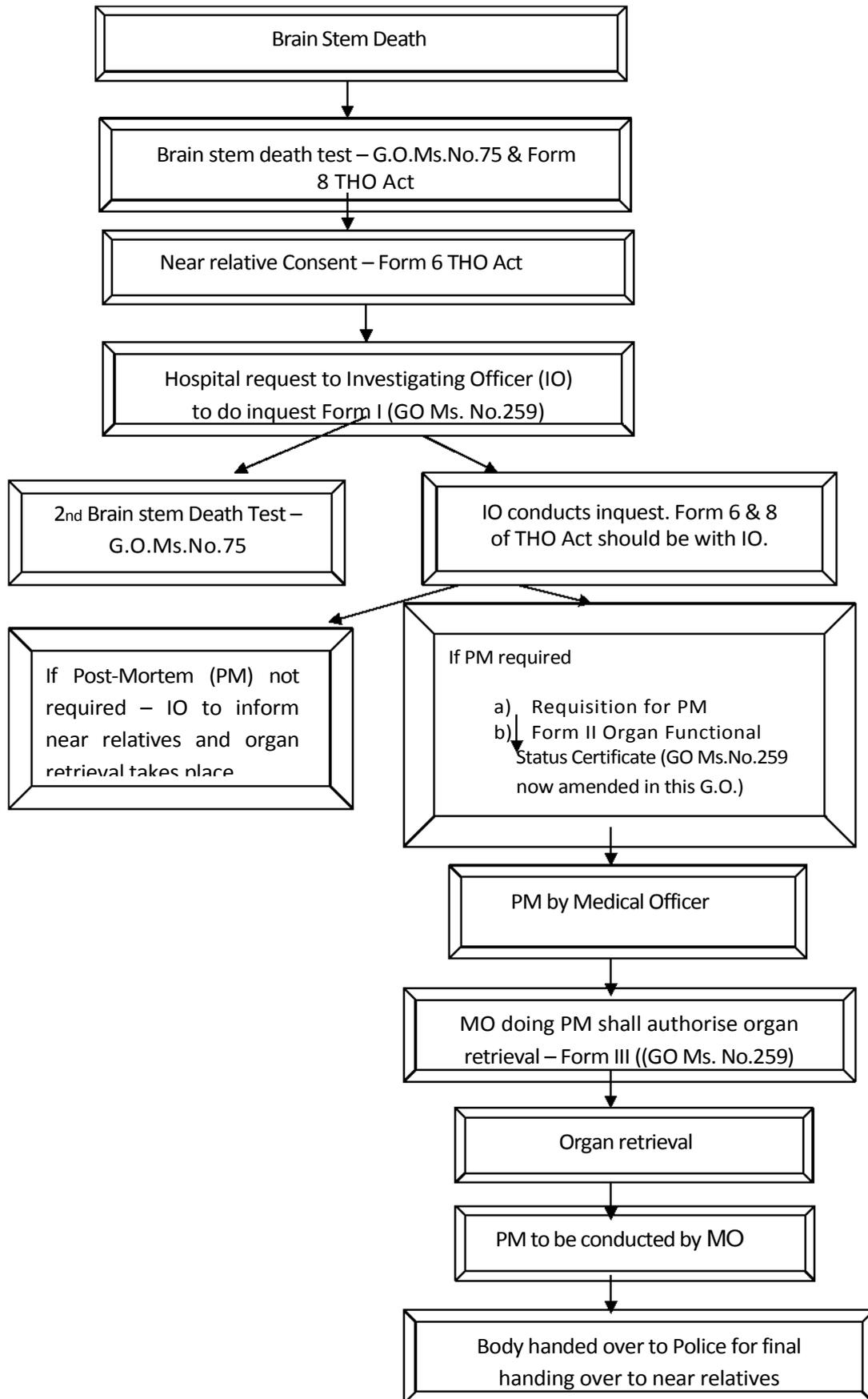
The Home Department, Chennai - 9.

The Director General of Police, Chennai - 4.

The Convenor, Cadaver Organ transplantation Programme, Madras Medical College, Chennai-3.

SF/SC
/ FORWARDED BY ORDER /

SECTION OFFICER



Form - I
Police Intimation Form

From

Chief Medical Officer / Residential Medical Officer,

-----Hospital,

Address

To

The Inspector of Police / Investigating Officer

----- Police Station.

Address: _____)

Sir,

Thiru/Tmt----- aged ----- years of

(Address) sustained injuries (details) and was admitted in-----

hospital on----- (dd/mm/yy).

2. The near relatives of the patient have expressed a positive inclination to donate the organs of the patient in the event of the patient's Brain death. The Brain Death Certification process is now in progress, as per the Transplantation of Human Organs Act, 1994 (Central Act 42 of 1994).

3. You are requested to immediately come to the hospital in order to expedite the conduct of the inquest and carry out necessary procedures to enable the Cadaver Organ donation.

Yours faithfully,

Copy to:

Concerned Commissioner of Police or
District Superintendent of Police

Form –II

Organ(s) functional status certificate.

This is to state that Thiru / Tmt _____ S/o /
D/o _____ who had been admitted in our hospital
on _____ (date) (IP No. _____ .) has been certified as Brain dead on _____
(date) at ___ __ A.M. / P.M. as per the THO Act, 1994.

It is certified that the following organs of this brain dead potential organ donor are in
functioning status:

- 1)
- 2)
- 3)
- 4)
- 5)

(Signature by anyone of the doctors authorized by the Medical Superintendent of the
hospital.)

// True Copy //

SECTION OFFICER

Form – III

Organ Retrieval Authorization Form

I / We, Dr. ----- hereby authorize, as per
Section 6 of the Transplantation of Human Organs Act, 1994, (Central Act 42 of 1994)
for the retrieval, of the under mentioned organs, for the purpose of transplantation from
the Brain Cadaver of Thiru / Tmt -----

----- s/o / d/o -----

whose Brain Death was certified as per the said Act 1994 and the functioning status of the
organs intended to be retrieved for transplantation purpose have been certified. **organ**

authorized for retrieval:

- (1)
- (2)
- (3)
- (4)
- (5)

(Signature of the Post – mortem Medical Officer who will conduct Post-mortem)



ABSTRACT

Health and Family Welfare Department-Cadaver Organ transplantation - Participation of Private Hospitals in the State - Compulsory – Orders – Issued.

Health and Family Welfare (Z1) Department

G.O. (Ms) No.87

Dated 26 -2-2011

Thiruvalluvar Aandu - 2040

Masi 14

Read :

1. G.O. (Ms) No.6, Health and Family Welfare (Z1) Department, dated 8.1.2008.
2. G.O. (Ms) No.75, Health and Family Welfare (Z1) Department, dated 3.3.2008.
3. G.O.(Ms) No.175, Health and Family Welfare (Z1) Department, dated 6.6.2008.
4. G.O.(Ms) No.287, Health and Family Welfare Department, dated 5.9.2008.
5. G.O.(Ms) No.288, Health and Family Welfare Department, dated 5.9.2008.
6. G.O.(Ms) No.296, Health and Family Welfare Department, dated 16.9.2008.
7. G.O.(Ms) No.259, Health and Family Welfare (Z1) Department, dated 14.9.2010.

In the Government orders first to six read above, orders were issued initiating several steps to streamline Organ donation. As a result of procedures for declaration of brain death, procedures for organ sharing in the case of Cadaver Organ donations, responsibilities of Transplant Coordinators in hospitals, designating a Convenor to co-ordinate Cadaver transplants at the State level and procedural formalities for postmortem examination have been clearly outlined and specified. As a result, Cadaver Organ donation has been made procedurally and structurally possible.

2. Several public minded citizens have come forward in their time of grief to donate the organs of their loved ones to suffering patients who have no other option available thereby giving them new lease of life. Considering the positive response in the State, there is greater responsibility on the Government to ensure that the positive public sentiment in this regard is safeguarded. Transparency and accountability continue to be of paramount importance in the continued sustaining effort behind the programme. Further, there is need to ensure that all stakeholders bind themselves to a uniform and streamlined code that would ensure long-term success of the Cadaver donation programme in the State.

3. In the Government order fourth read above, orders were issued for sharing of Cadaver organs and other related aspects of priority etc. in Organ allocation and the working of the Cadaver Organ Transplant in the State. In the above G.O., participation of Private Hospitals in the program has been made optional.

4. The Government have examined the need of ensuring all transplant hospitals and stakeholders involved in Cadaver Organ Transplant are brought into one unified system of functioning and Organ sharing, and decided to bring all hospitals involved in Cadaver Organ Transplant to be a part of the Cadaver Organ donation and Transplant programme in the manner prescribed by the Government.

5. Accordingly the Government hereby order that the Cadaver Organ donation and sharing programme as specified by the Government and the Advisory Committee as ordered in the Government order fourth read above shall be necessarily followed by all hospitals approved for organ transplantation in the State. All hospitals desirous of doing Cadaver Organ Transplants shall enroll their institution with the State Cadaver Transplant programme established for this purpose by Government of Tamil Nadu.

(BY ORDER OF THE GOVERNOR)

V.K.SUBBURAJ,
PRINCIPAL SECRETARY TO GOVERNMENT

- To
- All Transplant Hospitals through the Director of Medical and Rural Health Services, Chennai – 6.
 - The Director of Medical Education, Chennai-10
 - The Director of Medical and Rural Health Services, Chennai-6. The Dean, Government General Hospital, Chennai-3.
 - The Dean, Government Stanley Hospital, Chennai-1.
 - The Dean, Government Kilpaku Medical College, Chennai-10.

Copy to:-

- Home Department, Chennai -9.
- SF/SC

/ FORWARDED BY ORDER /

SECTION OFFICER

Annexure 3

**LIST OF APPROVED HOSPITALS FOR ORGAN TRANSPLANTATION – KIDNEY AS ON
24.04.2011**

Sl.No	Name and Address	Valid Up to
1	Director of Medical Services, Apollo Hospitals Enterprises Ltd., No.21, Greams Lane, Off.Greams Road, Chennai.	31.08.2011
2	Director of Medical Education and Medical Superintendent, Miot Hospitals, 4/112, Mount Poonamamlee Road, Manapakkam, Chennai-89.	04.06.2011
3	Proprietor, The Guest Hopital, 782, Poonamallee High Road, Kilpauk, Chennai-10.	29.02.2012
4	General Manager, Vijaya Hospital, 180, NSK Road, Chennai-26.	31.08.2011
5	Proprietor, Sugam Hospital,	05.12.2012

	349 Thiruvotriyur High Road, Thiruvotriyur, Chennai 19.	
6	Administrative Manager, Chennai Kallappa Hospital, 43, II Main Road, R.A.Puram, Chennai-28.	30.06.2012
7	The General Manager, Sundaram Medical Foundation,Shanthi Colony, 4 th Avenue,Anna Nagar, Chennai-40.	31.10.2011
8	The Managress, Dr.Metha's Hospitals Pvt Ltd., 21, M.C.Nichols Road, Chetput, Chennai-31.	23.12.2011
9	The Dean, Government Kilpauk Medical College Hospital, Poonamallee High Road, Chennai-10.	24.05.2011
10	The Dean, Government General Hospital, Chennai 600 003	31.08.2011
11	Executive Director, M/S.Kumaran Hospital, 869, EVR Periyar Road, Chennai-10.	29.02.2012
12	The Dean, Government Stanley Hospital,	31.08.2011

	Chennai-600 001.	
13	Director, Malar Hospitals, No.52, 1 st Main Road, Gandhi Nagar, Adyar, Chennai-20.	31.08.2011
14	Medical Director, Trinity Nursing Home (P) Ltd., 33, Desika Road, Alwarpet, Chennai-40.	31.08.2011
15	Medical Director, Sri Ramachandra Medical College and Research Institute, Porur, Chennai-116.	18.07.2012
16	Director, M/S.Chennai Transplantation Centre, 8 th Floor, ICUD, 4A, Dr.J.Jayalalitha Nagar, Mugappair, Chennai-50.	26.01.2013
17	Director and Superintendent, Government Royapettah Hospital, Chennai-14.	15.04.2014
18	K. J. Hospital, 182 P.H. Road, Chennai 84	11.05.2011
19	Academic Director,	19.09.2012

	Chettinad Hospital and Research Institute, I.T. High Way, Kelambakkam, Kancheepuram District PIN 603 103	
20	Managing Director,	31.08.2011
	M.R. Hospital, 20 Govindan Street, Ayyavoo Colony, Aminjikarai, Chennai 600 020	
21	Proprietor, Aswin Soundra Nursing Home, 24 Kasturi Rengan Road, Teynampet, Chennai 600 018	05.06.2013
22	Prasanth Multi specialty Hospitals, No 77 Harrington Road, Chetpet, Chennai 600 031	23.06.2013
23	Chairman-Director, Kamakshi Memorial Hospital Pvt. Ltd, No1 Radial Road, Pallikarani, Chennai 601 302	23.03.2013
24	Chief Operating Officer, Global Hospitals, Global Health City, 439 Cheran Nagar, Perumbakkam, Chennai 600 100	26.02.2014

25	Medical Director, Meenakshi Mission Hospital & Research Centre, Lake Area, Melur Road, Madurai-625 107.	31.08.2011
26	Medical Director, Madurai Kidney Foundation, Anna Nagar, Madurai.	31.08.2011
27	Director and Chief Nephrologist, Madurai Kidney Centre & Transplantation Research Institute, 6/6, B2, Sivagangai Road, Madurai-20.	31.08.2011
28	Director of Medical Services, M/S.Apollo Speciality Hospitals, Lakeview Road, K.K.Nagar, Madurai-625 020.	03.05.2014
29	The President, M/S.Kovai Medical Centre and Hospitals Ltd., Coimbatore-641 014.	31.08.2011 (Allowed to perform only approved near relative cases only by the authorization committee)
30	Director and Transplant Surgeon, Vedhanayagam Hospital Pvt. Ltd., 133, Bashyakaralu Road, R.S.Puram,	31.10.2011

	Coimbatore-641 002.	
31	Director, Sri Ramakrishna Hospital, 325, Sarojini Naidu Road, Sidhapurdur, Coimbatore-641 004.	31.08.2011
32	Chief Nephrologist, Coimbatore Kidney Centre, Puliakulam Road, Near Lakshmi Mills, Coimbatore 641 045	31.08.2011 (Registration suspended w.e.f. 23.12.2009)
33	Medical Director-SSH, M/S P.S.G. Hospitals, Avinashi Road, Peelamedu, Coimbatore 641 004.	16.07.2013
34	The Chairman, K.G.Hospitals & Post Graduate Medical Institute, Arts College Road, Coimbatore-641 018.	31.08.2011
35	The Dean, M/S G. Kuppusamy Naidu Memorial Hospital, P.B. Box No. 6327, Pappanaickan Palayam, Coimbatore 641 037	11.05.2011
36	Dr. S.P. Thiagarajan, M.D. D.M S.P. T.Hospitals, 46 Vivekanda Road, Ram Nagar, Coimbatore 641 009	27.07.2012

37	Consultant Nephrologist, M/S.Kidney Care Centre, Madurai Road, PTirunelveli Junction, Tirunelveli.	06.07.2012
38	Managing Trustee, Dr.Jeyasekaran Hospitals & Nursing Home, K.P.Road, Nagercoil-629 003.	06.06.2013
39	The Managing Director, Sri Gokulam Hospital, 3/60, Meyyannur, Salem-636 004.	10.09.2012
40	Executive Director, Assured Best Care Hospital (P) Ltd., No.1, Malligai Salai, Annamalai, Trichy-620 018.	17.11.2013
41	Medical Superintendent, Christian Medial College and Hospital, Vellore 632 004	11.06.2012
42	Managing Director, Kavery Medical Centre, No. 1 K.C. Road, Tennur, Trichirapalli 620 018	23.09.2013
43	The Chairman, D.D. Hospital and D.D. Medical Colleg, No 66 DD Nagar, Kunavalam Post,	21.03.2015

	Thiruvallur District PIN 631 210	
44	The Managing Director, Sri Abirami Hospitals and Pvt.Ltd., 33 Madukarai Road, Sundarapuram, Coimbatore 641 024	08.01.2014
45	The Managing Director, Bharathi Rajaa Speciality Hospital and Research Centre, No. 20 G.N. Chetty Road, Thiagaraya Nagar, Chennai 600 017	19.09.2012
46	The Medical Superintendent, Apollo First Med Hospitals, 154 P.H.Road, Chennai 10	27.11.2013
47	Chief Executive Officer, Chennai Meenakshi Multi Speciality Hosital Ltd., Old No 148 New No. 72 Luz Church Road, Mylapore, Chennai 600 004	03.02.2016
48	Authorized Signatory, Galaxy Hospitals, 110/E/20/1 North By Pass Road, Vannarpet, Tirunelveli 627 003	30.06.2011
49	Medical Director, Vinayaka Mission Hospital, Sangagiri Main Road, Veerapandi, Salem 636 308	31.05.2011

50	Medical Superintendent, Billroth Hospital, 43, Lakshmi Talkies Road, Shenoy Nagar 600 030	10.1.2015
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LIST OF APPROVED HOSPITALS FOR ORGAN TRANSPLANTATION – HEART AS ON
24.04.2011

S.No.	Name and Address	Valid Up to
1	Director of Medical Services, Apollo Hospitals Enterprises Ltd., No.21, Greams Lane, Off.Greams Road, Chennai.	31.08.2011
2	The Chairman, K.G.Hospitals & Post Graduate Medical Institute, Arts College Road, Coimbatore-641 018.	15.06.2011
3	Frontier Life Line, R-30-C Amabattur Industrial Estate, Chennai 600 101.	02.04.2013
4	Academic Director, Chettinad Hospital and Research Institute, I.T. High Way, Kelambakkam, Kancheepuram District PIN 603 103	19.02.2014
5	Madras Medical Mission, 4A, Dr.J.Jayalalitha Nagar, Mugappair, Chennai-50.	14.05.2014
6	The Dean, Government General Hospital, Chennai 600 001	24.05.2014
7	Chief Operating Officer, Global Hospitals and Health City, No 439 Cheran Nagar,	13.09.2015

	Perumbakkam, Chennai 600 100	
8	The Chairman, D.D. Hospital and D.D. Medical Colleg, No 66 DD Nagar, Kunavalam Post, Thiruvallur District PIN 631 210	24.02.2015
9	Medical Director, Sri Ramachandra Medical College and Research Institute, Porur, Chennai-116.	07.02.2015
10	Fortis Malar Hospitals Ltd., No 52 1 st Main Road, Gandhi Nagar, Adyar, Chennai 600 020	28.03.2015
11	The Dean, Sri Ramakrishna Hospital, 395 Sarojini Naidu Road, Sidhapudur, Coimbatore 641 044	26.12.2010 (under process)
12	The Medical Director, PSG Super Speciality Hospital, Peelamedu, Coimbatore 641 004	19.06.2015

LIST OF APPROVED HOSPITALS FOR ORGAN TRANSPLANTATION – LIVER AS ON
24.04.2011

S.No.	Name and Address	Valid Up to
1	Director of Medical Services, Apollo Hospitals Enterprises Ltd., No.21, Greams Lane, Off.Greams Road, Chennai	31.08.2011
2	Medical Superintendent, Christian Medial College and Hospital, Vellore 632 004	24.09.2014
3	Academic Director, Chettinad Hospital and Research Institute, I.T. High Way, Kelambakkam, Kancheepuram District, 603 103	27.04.2013
4	Chief Operating Officer, Global Hospitals, Global Health City, 439 Cheran Nagar, Perumbakkam, Chennai 600 100	13.05.2014
5	Director, Sri Ramakrishna Hospital, 325, Sarojini Naidu Road, Sidhapurdur, Coimbatore-641 004.	18.05.2011
6	The Dean, Government Staney Hospital, Chennai 600 003	27.01.2014
7	Medical Director, Sri Ramachandra Medical College and Research Institute,	30.09.2014

	Porur, Chennai-116.	
8	The Chairman, D.D. Hospital and D.D. Medical College, No 66 DD Nagar, Kunavalam Post, Thiruvallur District PIN 631 210	21.03.2015
9	The Madras Medical Mission, 4 A Dr. J. Jayalalitha Nagar, Mogappair, Chennai 600 037	27.12.2015
10	Managing Director, Vadamalaiyan Hospital, 9A Vallabai Road, Chokkikulam, Madurai – 2	17.05.2011

LIST OF APPROVED HOSPITALS FOR ORGAN TRANSPLANTATION – LUNGS AS ON
24.04.2011

S.No.	Name and Address	Valid Up to
1	Frontier Life Line, R-30-C Amabattur Industrial Estate, Chennai 600 101.	02.04.2013
2	Academic Director, Chettinad Hospital and Research Institute, I.T. High Way, Kelambakkam, Kancheepuram District PIN 603 103	19.02.2014
3	Director of Medical Services, Apollo Hospitals Enterprises Ltd., No.21, Greams Lane, Off.Greams Road, Chennai.	31.08.2011
4	The Medical Director, PSG Super Speciality Hospital, Peelamedu, Coimbatore 641 004	19.06.2015

LIST OF APPROVED HOSPITALS SPECIALTY WISE

AS ON 24.04.2011

Sl.No.	Speciality	Total number of Hospitals	Government Institutions	Private Institutions
1	Renal	47	05	42
2	Corneal	14	03	11
3	Heart	14	02	12
4	Liver	08	01	07
5	Lungs	04	NIL	04
6	Other Organ	01	NIL	01

**LIST OF APPROVED HOSPITALS FOR ORGAN TRANSPLANTATION – CORNEAL AS
ON 24.04.2011**

S.No.	Name and Address	Valid Up to
1	Aravind Eye Hospital, 1 Anna Nagar, Madurai 625 020	03.05.2011
2	The Eye Foundation 582 A.D.B., Road, R.S. Puram, Coimbatore 641 002	11.05.2011
3	Aravind Eye Hospital, Avinash Road, Coimbatore 641 014	11.05.2011
4	Sri Kanchi Kamakodi Medical Trust Hospital Eye Bank, Sivadapuram,Sakthi Road, Coimbatore 641 035	11.05.2011
5	The Chennai Eye Foundation (Prem's Eye Hospital) No 9 Bazaar Road, Saidapet, Chennai	08.12.2011
6	Church of South India Hospital, No 21 Hospital Road, Kandheepuram, PIN 631 502	24.04.2012
7	Government Rajaji Hospital, Madurai	03.02.2013
8	Government Head Quarters Hospital, Erode	24.08.2013
9	Sankara Eye Hospital, Sri Sankara Nagar, Pammal, Chennai 600 075	12.06.2013
10	Sri Ramachandra Hospital, No 1 Ramachandra Nagar, Porur, Chennai 600 116	23.03.2013
11	Thanjavour Medical College Government Raja Mirasudar Hospital, Thanjavore.	26.02.2014
12	Sankara Eye Society, 77 West Ponaurangam Road, R.S.Puram.,Coimbatore 641 002	17.12.2011

13	The Senior Executive Eye Bank, Sankaranethralaya, 18 College Road, Chennai 600 006	10.02.2015
14	The Medical Superintendent, Coimbatore Medical College Hospital, Coimbatore 18	27.12.2015
15	Director, Dr. Agarwwal's Eye Hospital Ltd., No 19 (old No 13) Cathedral Road, Chennai 600 086	30.04.2011
16	Director and Superintendent, Joseph Eye Hospital, Tiruchirapalli – 1	30.04.2011

LIST OF APPROVED HOSPITALS FOR ORGAN TRANSPLANTATIONHAND AS ON

24.04.2011

S.No.	Name of the Hospital	Valid Up to
01	Medical Superintendent, Government Stanley Medical College Hospital, Chennai 1	10.02.2016

Annexure 4

THE TRANSPLANTATION OF HUMAN ORGANS ACT, 1994

[Act No. 42 of 1994 dated 8th July, 1994]

An Act 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 of incidental thereto.

WHEREAS it is expedient to provide for the regulation removal storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs;

AND WHEREAS Parliament has no power to make laws for the States with respect to any of the matters aforesaid except as provided in articles 249 and 250 of the Constitution;

AND WHEREAS in pursuance of clause (1) of articles 252 of the Constitution, resolutions have been passed by all the Houses of the Legislatures of the States of Goa, Himachal Pradesh and Maharashtra to the effect that the matters aforesaid should be regulated in those States by Parliament by law;

BE it enacted by Parliament in the Forty-fifth year of the Republic of India as follows: -

CHAPTER I: PRELIMINARY

1. Short title, applications and commencement

(1) This Act may be called the Transplantation of Human Organs Act, 1994.

(2) It applies, in the first instance, to the whole of the States of Goa, Himachal Pradesh and Maharashtra and to all the Union territories and it shall also apply to such other State which adopts this Act by resolution passed in that behalf under clause (1) of article 252 of the Constitution.

(3) It shall come into force in the States of Goa, Himachal Pradesh and Maharashtra and in all the Union territories on such date¹ as the Central Government may, by notification appoint and in any other State which adopts this Act under clause (1) of article 252 of the Constitution, on the date of such adoption; and any reference in this Act to the commencement of this Act shall, in relation to any State or Union territory, means the date on which this Act comes into force in such State or Union territory.

2. Definitions

In this Act, unless the context otherwise requires,--

(a) "advertisement" includes any form of advertising whether to the public generally or to any section of the public or individually to selected persons;

(b) "Appropriate Authority" means the Appropriate Authority appointed under section 13;

(c) "Authorization Committee" means the committee constituted under clause (a) or clause (b) of sub-section (4) of section 9;

(d) "brain-stem death" means the stage at which all functions of the brain-stem have permanently and irreversibly ceased and is so certified under sub-section (6) of section 3;

- (e) "deceased person" means a person in whom permanent disappearance of all evidence of life occurs, by reason of brain-stem death or in a cardio-pulmonary sense, at any time after live birth has taken place;
- (f) "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 under sub-section (1) or sub-section (2) of section 3;
- (g) "hospital" includes a nursing home, clinic, medical centre, medical or teaching institution for therapeutic purposes and other like institution;
- (h) "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;
- (i) "near relative" means spouse, son, daughter, father, mother brother or sister;
- (j) "notification" means a notification published in the Official Gazette;
- (k) "payment" means payment in money or money's worth but does not include any payment for defraying or reimbursing-
 - (i) the cost of removing, transporting or preserving the human organ to be supplied; or
 - (ii) any expenses or loss of earnings incurred by a person so far as reasonably and directly attributable to his supplying any human organ from his body.
- (l) "prescribed" means prescribed by rules made under this Act;
- (m) "recipient" means a person into whom any human organ is, or is proposed to be, transplanted;
- (n) "registered medical practitioner" means a medical practitioner who possesses any recognized medical qualification as defined in clause (h) of section 2 of the Indian Medical Council Act, 1956, and who is enrolled on a State Medical Register as defined in clause (k) of that section;
- (o) "therapeutic purpose" means systematic treatment of any disease or the measures to improve health according to any particular method or modality; and
- (p) "Transplantation" means the grafting of any human organ from any living person or deceased person to some other living person for therapeutic purposes.

CHAPTER II: AUTHORITY FOR THE REMOVAL OF HUMAN ORGANS

3. Authority for removal of human organs

(1) Any donor may, in such manner and subject to such conditions as may be prescribed, authorize the removal, before his death, of any human organs of his body for therapeutic purposes.

(2) If any donor had, in writing and in the presence of two or more witnesses (at least one of whom is a near relative of such person), unequivocally authorized at any time before his death, the removal of any human organ of his body, after his death, for therapeutic purposes, the person lawfully in possession of the dead body of 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

facilities for the removal, for therapeutic purposes, of that human organ from the dead body of the donor.

(3) Where no such authority as is referred to in sub-section (2), 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 therapeutic purposes, the person lawfully in possession of the dead body of such person may, unless he has reason to believe that any near relative of the deceased person has objection to any of the deceased person's human organs being used for therapeutic purposes, authorize the removal of any human organ of the deceased person for its use for therapeutic purposes.

(4) The authority given under sub-section (1) or sub-section (2) or, as the case may be, sub-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.

(5) Where any human organ is to be removed from the body of a deceased person, the registered medical practitioner shall satisfy himself, before such removal, by a personal examination of the body from which any human organ is to be removed, that life is extinct in such body or, where it appears to be a case of brain-stem death, that such death has been certified under sub-section (6)

(6) Where any human organ is to be removed from the body of a person in the event of his brain-stem death, no such removal shall be undertaken unless such death is certified, in such form and in such manner and on satisfaction of such conditions and requirements as may be prescribed, by a Board of medical experts consisting of the following, namely:-

- (i) the registered medical practitioner in charge of the hospital in which brain-stem death has occurred;
- (ii) an independent registered medical practitioner, being a specialist, to be nominated by the registered medical practitioner specified in clause (i), from the panel of names approved by the Appropriate Authority;
- (iii) a neurologist or a neurosurgeon to be nominated by the registered medical practitioner specified in clause (i), from the panel of names approved by the Appropriate Authority ; and
- (iv) the registered medical practitioner treating the person whose brain-stem death has occurred .

(7) Notwithstanding anything contained in sub-section (3), where brain-stem death of any person, less than eighteen years of age, occurs and is certified under sub-section (6) , any of the parents of the deceased person may give authority, in such form and in such manner as may be prescribed, for the removal of any human organ from the body of the deceased person.

4. Removal of human organs not to be authorized in certain cases

(1) No facilities shall be granted under sub-section (2) of section 3 and no authority shall be given under sub-section (3) of that section for the removal of any human organ from the body of a deceased person, if the person required to grant such facilities, or empowered to give such authority, has reason to believe that an inquest may be required to be held in relation to such body in pursuance of the provisions of any law for the time being in force.

(2) No authority for the removal of any human organ from the body of a deceased person shall be given by a person to whom such body has been entrusted solely for the purpose of interment, cremation or other disposal.

5. Authority for removal of human organs in case of unclaimed bodies in hospital or prison

(1) In the case of a dead body lying in a hospital or prison and not claimed by any of the near relatives of the deceased person within forty-eight hours from the time of the death of the 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 form, 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 authorised in this behalf by the person in charge of the management or control thereof.

(2) No authority shall be given under sub-section (1) if the person empowered to give such authority has reason to believe that any near relative of the deceased person is likely to claim the dead body even though such near relative has not come forward to claim the body of the deceased person within the time specified in sub-section (1).

6. Authority for removal of human organs from bodies sent for postmortem examination for medicolegal or pathological purposes

Where the body of a person has been sent for post-mortem examination-

(a) for medico-legal purposes by reason of the death of such person having been caused by accident or any other unnatural cause; or

(b) 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, authorise the removal, for therapeutic purpose, 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.

7. Preservation of human organs

After the removal of any human organ from the body of any person, the registered medical practitioner shall take such steps for the preservation of the human organ so removed as may be prescribed.

8. Savings

(1) Nothing in the foregoing provisions of this Act shall be construed as rendering unlawful any dealing with the body or with any part of the body of a deceased person if such dealing would have been lawful if this Act had not been passed.

(2) Neither the grant of any facility or authority for the removal of any human organ from the body of a deceased person in accordance with the provisions of this Act nor the removal of any human organ from the body of a deceased person in pursuance of such authority shall be deemed to be an offence punishable under section 297 of the Indian Penal Code.

9. Restrictions on removal and transplantation of human organs

(1) Save as otherwise provided in sub-section (3), no human organ removed from the body of a donor before his death shall be transplanted into a recipient unless the donor is a near relative of the recipient.

(2) Where any donor authorises the removal of any of his human organs after his death under sub-section (2) of section 3 or any person competent or empowered to give authority for the removal of any

human organ from the body of any deceased person authorises such removal, the human organ may be removed and transplanted into the body of any recipient who may be in need of such human organ.

(3) If any donor authorises the removal of any of his human organs before his death under sub-section (1) of section 3 for transplantation into the body of such recipient, not being a near relative, as is specified by the donor by reason of affection or attachment towards the recipient or for any other special reasons, such human organ shall not be removed and transplanted without the prior approval of the Authorisation Committee.

(4) (a) The Central Government shall constitute, by notification, one or more Authorisation Committees consisting of such members as may be nominated by the Central Government on such terms and conditions as may be specified in the notification for each of the Union territories for the purposes of the section.

(5) On an application, jointly made, in such form and in such manner as may be prescribed, by the donor and the recipient, the Authorisation Committee shall, after holding an inquiry and after satisfying itself that the applicants have complied with all the requirements of this Act and the rules made there under, grant to the applicants approval for the removal and transplantation of the human organ.

(6) If, after the inquiry and after giving an opportunity to the applicants of being heard, the Authorisation Committee is satisfied that the applicants have not complied with the requirements of this Act and the rules made thereunder, it shall, for reasons to be recorded in writing, reject the application for approval.

CHAPTER III: REGULATION OF HOSPITALS

10. Regulation of hospitals conducting the removal, storage or transplantation of human organs

(1) On and from the commencement of this Act,-

(a) no hospital, unless registered under this Act, shall conduct, or associate with, or help in, the removal, storage, or transplantation of any human organ;

(b) no medical practitioner or any other person shall conduct, or cause to be conducted, or aid in conducting by himself or through any other person, any activity relating to the removal, storage or transplantation of any human organ at a place other than a place registered under this Act; and

(c) No place including a hospital registered under sub-section (1) of section 15 shall be used or cause to be used by any person for the removal, storage or transplantation of any human organ except for therapeutic purposes.

(2) Notwithstanding anything contained in sub-section (1), the eyes or the ears may be removed at any place from the dead body of any donor, for therapeutic purposes, by a registered medical practitioner.

Explanation -For the purposes of this sub-section, "ears" includes ear drums and ear bones.

11. Prohibition of removal or transplantation of human organs for any purpose other than therapeutic purposes

No donor and no person empowered to give authority for the removal of any human organ shall authorise the removal of any human organ for any purpose other than therapeutic purposes.

12. Explaining effects, etc., to donor and recipient

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.

CHAPTER IV: APPROPRIATE AUTHORITY

13. Appropriate Authority

(1) The Central Government shall appoint, by notification, one or more officers as Appropriate Authorities for each of the Union territories for the purposes of this Act.

(2) The State Government shall appoint, by notification, one or more officers as Appropriate Authorities for the purposes of this Act.

(3) The Appropriate Authority shall perform the following functions, namely:-

(i) to grant registration under sub-section (1) of section 15 or renew registration under sub-section (3) of that section;

(ii) to suspend or cancel registration under sub-section (2) of section 16;

(iii) to enforce such standards, as may be prescribed, for hospitals engaged in the removal, storage or transplantation of any human organ ;

(iv) to investigate any complaint of breach of any of the provisions of this Act or any of the rules made thereunder and take appropriate action;

(v) to inspect hospitals periodically for examination of the quality of transplantation and the follow-up medical care to persons who have undergone transplantation and the persons from whom organs are removed; and

(vi) to undertake such other measures may be prescribed.

CHAPTER V: REGISTRATION OF HOSPITALS

14. Registration of hospitals engaged in removal, storage or transplantation of human organs

(1) No hospital shall commence any activity relating to the removal, storage or transplantation of any human organ for therapeutic purposes after the commencement of this Act unless such hospital is duly registered under this Act:

Provided that every hospital engaged, either partly or exclusively, in any activity relating to the removal, storage or transplantation of any human organ for therapeutic purposes immediately before the commencement of this Act, shall apply for registration within sixty days from the date of such commencement:

Provided further that every hospital engaged in any activity relating to the removal, storage or transplantation of any human organ shall cease to engage in any such activity on the expiry of three months from the date of commencement of this Act unless such hospital has appeared for registration and is so registered or till such application is disposed of, whichever is earlier.

(2) Every application for registration under sub-section (1) shall be made to the Appropriate Authority in such form and in such manner and shall be accompanied by such fees as may be prescribed.

(3) No hospital shall be registered under this Act unless the Appropriate Authority is satisfied that such hospital is in a position to provide such specialised services and facilities, possess such skilled manpower and equipments and maintain such standards as may be prescribed.

15. Certificate of registration

(1) The Appropriate Authority shall, after holding an inquiry and after satisfying itself that the applicant has complied with all the requirements of this Act and the rules made thereunder, grant to the hospital a certificate of registration in such form, for such period and subject to such conditions as may be prescribed.

(2) If, after the inquiry and after giving an opportunity to the applicant of being heard, the Appropriate Authority is satisfied that the applicant has not complied with the requirements of this Act and the rules made thereunder, it shall, for reasons to be recorded in writing, reject the application for registration.

(3) Every certificate of registration shall be renewed in such manner and on payment of such fees as may be prescribed.

16. Suspension or cancellation of registration

(1) The Appropriate Authority may, suo moto or on complaint, issue a notice to any hospital to show cause why its registration under this Act should not be suspended or cancelled for the reasons mentioned in the notice.

(2) If, after giving a reasonable opportunity of being heard to the hospital, the Appropriate Authority is satisfied that there has been, a breach of any of the provisions of this Act or the rules made thereunder, it may, without prejudice to any criminal action that it may take against such hospital, suspend its registration for such period as it may think fit or cancel its registration:

Provided that where the Appropriate Authority is of the opinion that it is necessary or expedient so to do in the public interest, it may, for reasons to be recorded in writing, suspend the registration of any hospital without issuing any notice.

17. Appeals

Any person aggrieved by an order of the Authorisation Committee rejecting an application for approval under sub-section (6) of section 9, or any hospital aggrieved by an order of the Appropriate Authority rejecting an application for registration under sub-section (2) of section 15 or an order of suspension or cancellation of registration under sub-section (2) sub-section 16, may, within thirty day from the date of the receipt of the order, prefer an appeal, in such manner as may be prescribed, against such order to-

(i) the Central Government where the appeal is against the order of the Authorisation Committee constituted under clause (a) of sub-section (4) of section 9 or against the order of the Appropriate Authority appointed under sub-section (1) of section 13; or

(ii) the State Government, where the appeal is against the order of the Authorisation Committee constituted under clause (b) of sub-section (4) of section 9 or against the order of the Appropriate Authority appointed under sub-section (2) of section 13.

CHAPTER VI: OFFENCES AND PENALTIES

18. Punishment for removal of human organ without authority

(1) Any person who renders his services to or at any hospital and who, for purposes of transplantation, conducts, associates with, or helps 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.

(2) 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.

19. Punishment for commercial dealings in human organs

Whoever -

- (a) Makes or receives any payment for the supply of, or for an offer to supply, any human organ;
- (b) seeks to find a person willing to supply for payment any human organ;
- (c) offers to supply any human organ for payment;
- (d) Initiates or negotiates any arrangement involving the making of any payment for the supply of, or for an offer to supply, any human organ;
- (e) Takes part in the management or control of a body of persons, whether a society, firm or company, whose activities consist of or include the initiation or negotiation of any arrangement referred to in clause (d); or
- (f) Publishes or distributes or causes to be published or distributed any advertisement, -
 - (i) Inviting persons to supply for payment of any human organ;
 - (ii) Offering to supply any human organ for payment; or
 - (iii) Indicating that the advertiser is willing to initiate or negotiate any arrangement referred to in clause
- (iv) Shall be punishable with imprisonment for a term which shall not be less than two years but which may extend to seven years and shall be liable to fine which shall not be less than ten thousand rupees but may extend to twenty thousand rupees.

Provided that the court may, for any adequate and special reason to be mentioned in the judgement, impose sentences of imprisonment for a term of less than two years and a fine less than ten thousand rupees.

20. Punishment for contravention of any other provision of this Act

Whoever contravenes any provision of this Act or any rule made, of any condition of the registration granted, there under for which no punishment is separately provided in this Act, shall be punishable with imprisonment for a term which may extend to three years or with fine which may extend to five thousand rupees.

21. Offences by companies

(1) Where any offence punishable under this Act has been committed by a company, every person who, at the time the offence was committed was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where any offence punishable under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation - For the purposes of this section, -

- (a) "Company" means any body corporate and includes a firm or other association of individuals;
- and
- (b) "Director" in relation to a firm, means a partner in the firm.

22. Cognizance of offence

- (1) No court shall take cognizance of an offence under this Act except on a complaint made by-
- (a) the Appropriate Authority concerned, or any officer authorised in this behalf by the Central Government or the State Government or, as the case may be, the Appropriate Authority; or
 - (b) a person who has given notice of not less than sixty days, in such manner as may be prescribed, to the Appropriate Authority concerned, of the alleged offence and of the intention to make a complaint to the court.
- (2) No court other than that of a Metropolitan Magistrate or a Judicial Magistrate of the first class shall try any offence punishable under this Act.

(3) Where a complaint has been made under clause (b) or sub-section (1), the court may, on demand by such person, direct the Appropriate Authority to make available copies of the relevant records in its possession to such person.

CHAPTER VII : MISCELLANEOUS

23. Protection of action taken in good faith

- (1) No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of the provisions of this Act.
- (2) No suit or other legal proceeding shall lie against the Central Government or the State Government for any damage caused or likely to be caused for anything which is in good faith done or intended to be done in pursuance of the provisions of this Act.

24. Power to make rules

- (1) The Central Government may, by notification, make rules for carrying out the purposes of this Act.
- (2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-
- (a) the manner in which and the conditions subject to which any donor may authorise removal, before his death, of any human organ of his body under sub-section (1) of section 3;
 - (b) the form and the manner in which a brain-stem death is to be certified and the conditions and requirements which are to be satisfied for that purpose under sub-section (6) of section 3;
 - (c) the form and the manner in which any of the parents may give authority, in the case of brain-stem death of a minor, for the removal of any human organ under sub-section (7) of section 3;
 - (d) the form in which authority for the removal of any human organ from an unclaimed dead body may be given by the person incharge of the management or control of the hospital or prison under sub-section (1) of section 5;
 - (e) the steps to be taken for the preservation of the human organ removed from the body of any person under section 7;
 - (f) the form and the manner in which an application may be jointly made by the donor and the recipient under sub-section (5) of section 9;
 - (g) the manner in which all possible effects, complications and hazards connected with the removal and transplantation is to be explained by the registered medical practitioner to the donor and the recipient under section 12;

- (h) the standards as are to be enforced by the Appropriate Authority for hospitals engaged in the removal, storage or transplantation of any human organ under clause (iii) of sub-section (3) of section 13;
- (i) the other measures as the Appropriate Authority shall undertake in performing its functions under clause (vi) of sub-section (3) of section 13;
- (j) the form and the manner in which an application for registration shall be made and the fee which shall be accompanied, under sub-section (2) of section 14;
- (k) the specialised services and the facilities to be provided, skilled manpower and the equipments to be possessed and the standards to be maintained by a hospital for registration, under sub-section (3) of section 14;
- (l) the form in which, the period for which and the conditions subject to which certificate of registration is to be granted to a hospital, under sub-section (1) of section 15;
- (m) the manner in which and the fee on payment of which certificate of registration is to be renewed under sub-section (3) of section 15;
- (n) the manner in which an appeal may be preferred under section 17;
- (n) the manner in which a person is required to give notice to the Appropriate Authority of the alleged offence and of his intention to make a complaint to the court, under clause (b) of sub-section (1) of section 22; and
- (o) any other matter which is required to be, or may be, prescribed.

(3) Every rule made under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or both Houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

25. Repeal and saving

(1) The Ear Drums and Ear Bones (Authority for Use for Therapeutic Purposes) Act, 1982 and the Eyes (Authority for Use for Therapeutic Purposes) Act, 1982 are hereby repealed.

(2) The repeal shall, however, not affect the previous operation of the Acts so repealed or anything duly done or suffered thereunder.

Foot Notes

1. The Act came into force from 4th. February, 1995 in the States of Goa, Himachal Pradesh and Maharashtra and in all the Union Territories vide Notifications No. S.O. 80 (E) dated 4th. February, 1995.



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CHENNAI, WEDNESDAY, JULY 15, 2009
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Part II—Section 2 (Supplement)—

~~NOTIFICATIONS~~—BY
GOVERNMENT

HEALTH AND FAMILY WELFARE DEPARTMENT

**Amendment to the Transplantation of Human Organs
Rules, 1995**

[G.O. Ms. No. 179, Health and Family Welfare (Z-1), 18th June 2009, Aani 4, Thiruvalluvar Aandu-2040.]

No. II(2)/HF/358/2009.—The following Amendment Notification of Government of India, Ministry of Health and Family Welfare, dated 4th August 2008 in republished:—

G.S.R. 51 (E).—In exercise of the powers conferred by sub-section (1) of Section 24 of the Transplantation of Human Organs Act, 1994 (42 of 1994), the Central Government hereby makes the following rules, namely:—

1. Short title and Commencement:

(1) These rules may be called the Transplantation of Human Organs Rules, 1995.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions:

(a) "Act" means the Transplantation of Human Organs Act, 1994 (42 of 1994);

(b) "Form" means a form annexed to these Rules; (c) "Section" means a section of the Act;

¹(d) "National Accreditation Board for Laboratories" (NABL) means a Board set up by the Quality Council of India (set up by the Government of India) for undertaking assessment and accreditation of testing and calibration of laboratories in accordance with the international standard ISO/IEC 17025 and ISO 15189;¹
Inserted vide Gazette notification dated 04-08-2008

²(e) the Registered Medical Practitioner, as defined in clause (n) of section 2 of Transplantation of Human Organs Act, 1994 includes an allopathic doctor with MBBS or equivalent degree under the Medical Council of India Act.

³Inserted vide Gazette notification dated 04-08-2008

³(f) words and expression used and not defined in these Rules, but defined in the Act, shall have the same meanings respectively assigned to them in the Act.

³Re-numbered as clause (f) vide Gazette notification dated 4th August 2008. of the earlier clause (d)

3. Authority for Removal of Human Organ:

Any donor may authorize the removal, before his death, of any human organ of his body for therapeutic purposes in the manner and on such conditions as specified in

⁴Form 1(A), 1(8) and 1(C).

⁴Amended vide Gazette notification dated 04th August 2008.

4. Duties of the Medical Practitioner:

⁵(1) A registered medical practitioner shall, before removing a human organ from the body of a donor before his death, satisfy himself-

DTP—II-2 Sup. (27A)—1

Substituted vide Gazette notification dated 04th August 2008.

(a) that the donor has given his authorization in appropriate Form 1 (A) or 1(8) or 1(C).

(b) that the donor is in proper state of health and is fit to donate the organ, and the registered medical practitioner shall sign a certificate as specified in Form 2.

(c) that the donor is a near relative of the recipient, as certified in Form 3, who has signed Form 1 (A) or 1 (B) as applicable to the donor and that the donor has submitted an application in Form 10 jointly with the recipient and that the proposed donation has been approved by the concerned competent authority and that the necessary documents as prescribed and medical tests, if required, to determine the factum of near relationship, have been examined to the satisfaction of the Registered Medical Practitioner i.e. Incharge of transplant centre.

(d) that in case the recipient is spouse of the donor, the donor has given a statement to the effect that they are so related by signing a certificate in Form 1 (8) and has submitted an application in Form 10 jointly with the recipient and that the proposed donation has been approved by the concerned competent authority under provisions of sub-rule(2) of rule 4A.

(e) In case of a donor who is other than a near relative and has signed Form 1(C) and submitted an application in Form 10 jointly with the recipient, the permission from the Authorisation Committee for the said donation has been obtained.

(2) A registered medical practitioner shall before removing a human organ from the body of a person after his death satisfy himself-

(a) that the donor had, in the presence of two or more witness (at least one of whom is a near relative of such persons) unequivocally authorised as specified in Form 5 before his death, the removal of the human organ of his body, after his death, for therapeutic purposes and there is no reason to believe that the donor had subsequently revoked the authority aforesaid;

⁶(b) that then person lawfully in possession of the dead body has signed a certificate as specified in Form 6⁷

⁶Substituted vide Gazette notification dated 04th August 2008.

⁷The need for Certificate in form 7 deleted by Gazette Notification, dated 04th August 2008.

(3) A registered medical practitioner shall, before removing a human organ from the body of a person in the event of his brainstem death, satisfy himself:-

(a) that a certificate as specified in Form 8 has been signed by all the members of the Board of medical experts referred to in sub-section (6) of Section 3 of the Act;

(b) that in the case of brain-stem death of a person of less than eighteen years of age, a certificate specified in-Form 8 has been signed by all the members of the Board of medical experts referred to in sub-section (6) of Section 3 of the Act and an authority as specified in Form 9 has been signed by either of the parents of such person.

⁸4-A Authorisation Committee:

(1) The medical practitioner who will be pali of the

organ transplantation team for carrying out transplantation operation shall not be a member of the Authorisation Committee constituted under the provisions of clauses (a) and (b) of sub-section(4) of section 9 of the Act.

(2) Where the proposed transplantation is between a married couple, the Registered Medical Practitioner i.e. Incharge of transplant centre must evaluate the factum and duration of marriage and ensure that documents such as marriage certificate, marriage photograph etc. are kept for records along with the information on the number and age of children and family photograph depicting the entire immediate family, birth certificate of children containing particulars of parents.

(3) When the proposed donor or recipient or both are not Indian Nationals/citizens whether 'near relatives' or otherwise, Authorisation Committees shall consider all such requests.

(4) When the proposed donor and the recipient are not 'near relatives', as defined under clause(i) of section 2 of the Act, the Authorisation Committee shall evaluate that,-

(i) there is no commercial transaction between the recipient and the donor and that no payment or money or moneys worth as referred to the Act, has been made to the donor or promised to be made to the donor or any other person;

(ii) the followilg shall specifically be assessed by the Authorisation Committee:-

(a) an explanation of the link between them and the circumstances which led to the offer being made;

(b) reasons why the donor wishes 'to 'donate'; (c) documentary evidence of the link, e.g. proof that they have lived together, etc.;

(d) old photographs showing the donor and the recipient together;

(iii) that there is no middleman or tout involved; (iv) that financial status of the donor and the recipient is probed by asking them to give appropriate evidence of their vocation and income for the previous three financial years. Any gross disparity between the status of the two must be evaluated in the "backdrop of the objective of preventing commercial dealing;

(v) that the donor is not a drug addict or known person with criminal record;

(vi) that the next of the kin of the proposed unrelated donor is interviewed regarding awareness about his or her intention to donate an organ, the authenticity of the link between the donor and the recipient and the reasons for donation. Any strong views or disagreement or objection of such kin shall also be recorded and taken note of.⁸

⁸Inserted vide Gazette notification dated 04th August 2008.

5. Preservation of Organs

The organ removed shall be preserved according to current and accepted scientific methods in order to ensure

viability for the purpose of transplantation.

⁹6. The donor and the recipient shall make jointly an application to grant approval for removal and transplantation of a human organ, to the concerned competent authority or Authorisation Committee as specified in Form 10. The Authorisation Committee shall take a decision on such application in accordance with the guidelines in rule 6-A."

⁹Substituted vide Gazette notification dated 04th August 2008.

¹⁰6(A) Composition of Authorisation Committees.

1. There shall be one State level Authorisation Committee.

2. Additional authorisation committees may be set up at various levels as per norms given below, namely:—

(i) no member from transplant team of the institution should be a member of the respective Authorisation Committee. All Foreign Nationals (related and unrelated) should go to 'Authorisation Committee' as abundant precaution needs to be taken in such cases;

(ii) Authorisation Committee should, be Hospital based in Metro and big Cities if the number of transplants exceed 25 in a year at the respective transplantation centres. In smaller towns, there are State or District level Committees if transplants are less than 25 in a year in the respective districts.

(A) Composition of Hospital Based Authorisation Committees: (To be constituted by the State Government and in case of Union territory by the Central Government).

(a) the senior most person officiating as Medical Director or Medical Superintendent of the Hospital;

(b) two senior medical practitioners from the same hospital who are not part of the transplant team;

(c) two members being persons of high integrity, social standing and credibility, who have served in high ranking Government positions, such as in higher judiciary, senior cadre of police service or who have served as a reader or professor in University Grants Commission approved University or are self-employed professionals of repute such as lawyers, chartered accountants and doctors (of Indian Medical Association) etc.; and.

(d) Secretary (Health) or nominee and Director Health Services or nominee.

(B) Composition of State or District Level Authorisation Committees: (To be constituted by the State Government and in case of Union, territory by the Central Government).

(a) a Medical Practitioner officiating as Chief Medical Officer or any other equivalent post in the main/major Government Hospital of the District.

(b) two senior medical practitioners to be chosen from the pool of such medical practitioners who are residing in the concerned District and who are not part of any transplant team.

(c) two senior citizens, non-medical background (one lady) of high reputation and integrity to be chosen from the pool of such citizens residing in the same district, who have served in high ranking Government positions, such as in higher

judiciary, senior cadre of police service or who have served as a reader or professor in University Grants Commission approved University or are self-employed professionals of repute such as lawyers, chartered accountants and doctors (of Indian Medical Association) etc., and

(d) Secretary (Health) or nominee and Director Health Services or nominee.

(NOTE: Effort should be made to have most of the members' ex-officio so that the need to change the composition of committee is less frequent.)

¹⁰Inserted vide Gazette notification dated 04th August 2008.

¹¹6B. The State level committees shall be formed for the purpose of providing approval or no objection certificate to the respective donor and recipient to establish the legal and residential status as a domicile state. It is mandatory that if donor, recipient and place of transplantation are from different states, then the approval or 'no objection certificate' from the respective domicile State Government should be necessary. The institution where the transplant is to be undertaken in such case the approval of Authorisation Committee is mandatory.

¹¹Inserted vide Gazette notification dated 04th August 2008.

¹²6C. The quorum of the Authorisation Committee should be minimum four. However, quorum ought not to be considered as complete without the participation of the Chairman. The presence of Secretary (Health) or nominee and Director of Health Services or nominee is mandatory.

¹²Inserted vide Gazette notification dated 04th August 2008.

¹³6D. The format of the Authorisation Committee approval should be uniform in all the institutions in a State. The format may be notified by respective State Government.

¹³Inserted vide Gazette notification dated 04th August 2008.

¹⁴6E. Secretariat of the Committee shall circulate copies of all applications received from the proposed donors to all members of the Committee. Such applications should be circulated along with all annexure, which may have been filed along with the applications. In the title of the meeting, the Authorisation Committee should take note of all relevant

contents and documents in the course of its decision making process and in the event any document or information is found to be inadequate or doubtful, explanation should be sought from the applicant and if it is considered necessary that any fact or information requires to be verified in order to confirm its veracity or correctness, the same be ascertained through the concerned officer(s) of the State/ Union territory Government.

¹⁴Inserted vide Gazette notification dated 04th August 2008.

¹⁵6F. The Authorisation Committee shall focus its attention on the following, namely:—

¹⁵Inserted vide Gazette notification dated 04th August 2008.

(a) Where the proposed transplant is between persons related genetically, Mother, Father, Brother, Sister, Son or Daughter (above the age of 18 years).

the concerned competent authority shall evaluate:— (i)

results of tissue typing and other basic tests;

(ii) documentary evidence of relationship e.g. relevant birth certificates and marriage certificate, certificate from Sub-divisional magistrate/ Metropolitan Magistrate/or Sarpanch of the Panchayat;

(iii) documentary evidence of identity and residence of the proposed donor e.g. Ration Card or Voters identity Card or Passport or Driving License or PAN Card or Bank Account and family photograph depicting the proposed donor and the proposed recipient along with another near relative;

(iv) if in its opinion, the relationship is not conclusively established after evaluating the above evidence, it may in its discretion direct further medical tests as prescribed as below:

(a) the tests for Human Leukocyte Antigen (HLA), Human Leukocyte Antigen- B alleles to be performed by the serological and/or Polymerase chain reaction (PCR) based Deoxyribonucleic acid (DNA) methods.

(b) test for Human Leukocyte Antigen-DR beta genes to be performed using the Polymerase chain reaction (PCR) based Deoxyribonucleic acid (DNA) methods.

(c) the tests referred to in sub-rules (i) and (ii) shall be got done from a laboratory accredited with National Accreditation Board for Laboratories (NABL)."

(d) where the tests referred to in (i) to (iii) above do not establish a genetic relationship between the donor and the recipient, the same tests to be performed on both or at least one parent, preferably both parents. If parents are not available, same tests to be performed on such relatives of donor and recipient as are available and are willing to be tested failing which, genetic relationship between the donor and the recipient will be deemed to have not been established.

(b) The papers for approval of transplantation would be processed by the registered medical practitioner and

administrative division of the Institution for transplantation, while the approval will be granted by the Authorisation Committee.

(c) Where the proposed transplant is between a married couple (except foreigners, whose cases should be dealt by Authorisation Committee):

The concerned competent authority or authorisation committee as the case may be must evaluate all available evidence to establish the factum and duration of marriage and ensure that documents such as marriage certificate, marriage photograph is placed before the committee along with the information on the number and age of children and a family photograph depicting the entire immediate family, birth certificate of children containing the particulars of parents.

(d) Where the proposed transplant is between individuals who are not "near relatives", The authorization committee shall evaluate:—

(i) that there is no commercial transaction between the recipient and the donor. That no payment of money or moneys worth as referred to in the sections of the Act, has been made to the donor or promised to be made to the donor or any other person. In this connection the Authorisation Committee shall take into consideration:—

(a) an explanation of the link between them and the circumstances which led to the offer being made;

(b) documentary evidence of the link e.g. proof that they have lived together etc.;

(c) reasons why the donor wishes to donate;

(d) old photographs showing the donor and the recipient together.

(ii) that there is no middleman/tout involved;

(iii) that financial status of the donor and the recipient is probed by asking them to give appropriate evidence of their vocation and income for the previous three financial years. Any gross disparity between the status of the two, must be evaluated in the backdrop of the objective of preventing commercial dealing;

(iv) that the donor is not a drug addict or a known person with criminal record;

(v) that the next of kin of the proposed unrelated donor is interviewed regarding awareness about his/her intention to donate an organ, the authenticity of the link between the donor and the recipient and the reasons for donation. Any strong views or disagreement or objection of such kin may also be recorded and taken note of;

and

(e) When the proposed donor or the recipient or both are foreigners:—

(i) a senior Embassy official of the country of origin has to certify the relationship between the donor and the recipient.

(ii) Authorisation Committee shall examine the cases of Indian donors consenting to donate organs to a foreign national (who is a near relative), including a foreign national of Indian origin, with greater caution. Such cases should be considered rarely on case to case basis.

(f) In the course, of determining eligibility of the applicant to donate, the applicant should be personally interviewed by the Authorisation Committee and minutes of the interview should be recorded. Such interviews with the donors should be videographed.

(g) In case where the donor is a woman greater precautions ought to be taken. Her identity and independent consent should be confirmed by a person other than the recipient. Any document with regard to the proof of residence or domicile and particulars of parentage should be relatable to the photo identity of the applicant in order to ensure that the documents pertain to the same person, who is the proposed donor and in the event of any inadequate or doubtful information to this effect, the Authorisation Committee may in its discretion seek such other information or evidence as may be expedient and desirable in the peculiar facts of the case.

(h) The Authorisation Committee should state in writing its reason for rejecting approving the application of the proposed donor and all approvals should be subject to the following conditions:—

(i) that the approved proposed donor would be subjected to all such medical tests as required at the relevant stages to determine his biological capacity and compatibility to donate the organ in question.

(ii) further that the psychiatrist clearance would also be mandatory to certify his mental condition, awareness, absence of any overt or latent psychiatric disease and ability to give free consent.

(iii) all prescribed forms have been and would be filled up by all relevant persons involved in the process of transplantation.

(iv) all interviews to be video recorded.

(i) The authorisation committee shall expedite its decision making process and use its discretion judiciously and pragmatically in all such cases where the patient requires immediate transplantation.

(j) Every authorised transplantation centre must have its own website. The Authorisation Committee is required to take final decision within 24 hours of holding the meeting for grant of permission or rejection for transplant. The decision of the Authorisation Committee

should be displayed on the notice board of the hospital or Institution immediately and should reflect on the website of the hospital or Institution within 24 hours of taking the decision. Apart from this, the website of the hospital or institution must update its website regularly in respect of the total number of the transplantations done in that hospital or institution along with the details of each transplantation. The same data should be accessible for compilation, analysis and further use by respective State Governments and Central Government.

¹⁵Inserted vide Gazette notification dated 04th August 2008.

7. Registration of Hospital

(1) An application for registration shall be made to the Appropriate Authority as specified in Form 11. The application shall be accompanied by a fee of rupees one thousand payable to the Appropriate Authority by means of a bank draft or postal order.

(2) The Appropriate Authority shall, after holding an inquiry and after satisfying itself that the applicant has complied with all the requirements, grant a certificate of registration as specified in Form 12 and shall be valid for a period of five years from the date of its issue and shall be renewable.

¹⁶(3) before a hospital is registered under the provisions of this rule, it shall be mandatory for the hospital to nominate a transplant coordinator.

¹⁶ Inserted vide Gazette notification dated 4th August 2008.

8. Renewal of Registration

(1) An application for the renewal of a certificate of registration shall be made to the Appropriate Authority within a period of three months prior to the date of expiry of the original certificate of registration and shall be accompanied by a fee of rupees five hundred payable to the Appropriate Authority by means of a bank draft or postal order.

(2) A renewal certificate of registration shall be as specified in Form 13 and shall be valid for a period of five years.

(3) If, after an inquiry including inspection of the hospital and scrutiny of its past performance and after giving an opportunity to the applicant, the Appropriate Authority is satisfied that the applicant, Since grant of certificate of registration under sub-rule (2) of Rule 7 has not complied with the requirements of this Act and Rules made there under and conditions subject to which the certificate of registration has been granted, shall, for reasons to be recorded in writing, refuse to grant renewal of the certificate of registration.

¹⁷⁹ Conditions for Grant of Certificate of Registration

No hospital shall be granted a certificate of registration under this Act unless it fulfils the following requirement of manpower, equipment, specialized services and facilities as laid down below:—

A General Manpower Requirement Specialised Services and Facilities:

(1) 24 hours availability of medical and surgical, (senior and junior) staff.

(2) 24 hours availability of nursing staff, (general and speciality trained).

(3) 24 hours availability of Intensive Care Units with adequate equipments, staff and support system, including specialists in anaesthesiology, intensive care.

(4) 24 hours availability of laboratory with multiple discipline testing facilities including but not limited to Microbiology, Bio-Chemistry, Pathology and Hematology and Radiology departments with trained staff.

(5) 24 hours availability of Operation Theater facilities (OT facilities) for planned and emergency procedures with adequate staff, support system and equipments.

(6) 24 hours availability of communication system, with power backup, including but not limited to multiple line telephones, public telephone systems, fax, computers and paper photo-imaging machine.

(7) Experts (Other than the experts required for the relevant transplantation) of relevant and associated specialties including but not limited to and depending upon the requirements, the experts in internal medicine, diabetology, gastroenterology, nephrology, neurology, paediatrics, gynaecology immunology and cardiology etc. should be available to the transplantation centre.

B Equipments:

Equipments as per current and expected scientific requirements specific to organ or organs being transplanted. The transplant centre should ensure the availability of the accessories, spare-parts and back-up/maintenance/service support system in relation to all relevant equipments.

C Experts and their qualifications:

(A) Kidney Transplantation:

M.S. (Gen.) Surgery or equivalent qualification with three years post M.S. training in a recognised center in India or abroad and having attended to adequate number of renal transplantation as an active member of team.

(B) Transplantation of liver and other abdominal organs

M.S. (Gen.) Surgery or equivalent qualification with adequate post M.S. training in an established center with a reasonable experience of performing liver transplantation as an active member of team.

(C) Cardiac, Pulmonary, Cardio-Pulmonary Transplantation:

M.Ch. Cardio-thoracic and vascular surgery or equivalent qualification in India or, abroad with at least 3 years experience as an active member of the team performing an adequate number of open heart operations per year and well-versed with Coronary by-pass surgery and Heart-valve surgery.

(D) Cornea Transplantation:

M.D./M.S. Ophthalmology or equivalent qualification with one year post M.D./M.S. training in a recognised hospital carrying out Corneal transplant operations.

¹⁷ Substituted vide Gazette notification dated 4th August 2008.

10. Appeal

(1) Any person aggrieved by an order of the Authorisation Committee under sub-section (6) of Section 9 or by an order of the Appropriate Authority under sub-section (2) of Section 15 and Section 16 of the Act, may, within thirty days from the date of receipt of the order, prefer an appeal to the Central Government.

(2) Every appeal shall be in writing and shall be accompanied by a copy of the order appealed against.

[F.No. S. 12011/12/2007-MS]

VINEET CHAWDHRY,

Joint Secretary to the Govt. of India.

1. Principal rules were published in the Gazette of India notification No: S-12011/2/1994-MS dated the 4th February, 1995 Extraordinary, under G.S.R.No, 51 (E).

2. Amendment to the rules were published in the Gazette of India notification, No: S.1201/12/2007-MS dated 31-7-2008 Extraordinary, under G.S.R. 571 (E) dated 4th August, 2008.

(To be completed by the prospective related donor) (See Rule 3)

My full name is.....
and this is my photograph

Photograph of the Donor
(Attested by Notary Public)

To be affixed
and
attested by
Notary
Public after it is
affixed.

My permanent home address is

.....

.....Tel: My present
home address is

.....

.....Tel: Date of birth
.....(day/month/year)

* Ration/Consumer Card number and Date of issue & place..... (Photocopy attached)

and/or

* Voter's I-Card number, date of issue, Assembly constituency..... (Photocopy attached)

and/or

* Passport number and country of issue (Photocopy attached)

and/or

* Driving Licence number, Date of issue, licensing authority..... (Photocopy attached)

and/or

* PAN..... and/or

* Other proof of identity and address.....

I hereby authorize removal for therapeutic purposes/consent to donate my.....(state which organ)
to my relative(specify son/daughter/father/mother/brother/sister), whose name is
.....and who was born on.....(day/month/year) and whose particulars are as
follows:

Photograph of the Recipient
(Attested by Notary Public)

To be affixed
and attested
by Notary
Public after it is
affixed.

- * Ration/Consumer Card number and Date of issue & place:.....
(Photocopy attached)
and/or
- * Voter's I-Card number, date of issue, Assembly constituency..... (Photocopy attached)
and/or
- * Passport number and country of issue..... (Photocopy attached)
and/or
- * Driving Licence number Date of issue, licensing authority.....
(Photocopy attached)
and/or
- * PAN..... and/or
- * Other proof of identity and address.....

I solemnly affirm and declare that:

Sections 2,9 and 19 of The Transplantation of Human Organs Act 1994 have been explained to me and I confirm that:

1. I understand the nature of criminal offences referred to in the sections.
2. No payment of money or money's worth as referred to in the sections of the Act has been made to me or will be made to me or any other person.
3. I am giving the consent and authorisation to remove my..... (organ) of my own free will without any undue pressure, inducement, influence or allurement.
4. I have been given a full explanation of the nature of the medical procedure involved and the risks involved for me in the removal of my.....(organ). That explanation was given by(name of registered medical practitioner).
5. I understand the nature of that medical procedure and of the risks to me as explained by that practitioner.
6. I understand that I may withdraw my consent to the removal of that organ at any time before the operation takes place.
7. I state that particulars filled by me in the form are true and correct to my knowledge and nothing material has been concealed by me.

.....
Signature of the prospective donor

.....
Date

NOTE:—To be sworn before Notary public, who while attesting shall ensure that the person/persons swearing the affidavit(s) Signs(s) on the Notary Register, as well.

- * ✓ wherever applicable.

¹⁹FORM 1(B)

(Page 1 of 2)

(To be completed by the prospective spousal donor) (See Rule 3)

My full name is.....
and this is my photograph

Photograph of the Donor
(Attested by Notary Public)

To be affixed
and
attested by
Notary
Public after it is
affixed.

My permanent home address is

.....

.....Tel:My present

home address is.....

.....

.....Tel:Date of birth

.....(day/month/year)

I authorize to remove for therapeutic purposes/consent to donate my.....(state which organ) to my
husband/wife.....whose full name is.....and who was born
on.....(day/month/year) and whose particulars are as follows:

Photograph of the Recipient
(Attested by Notary Public)

To be affixed
and attested
by Notary
Public after it is
affixed.

- * Ration/Consumer Card number and Date of issue & place.....
(Photocopy attached) and/or
- * Voter's I-Card number, date of issue, Assembly Constituency.....
(Photocopy attached) and/or
- * Passport number and country of issue (Photocopy attached) and/or
- * Driving Licence number, Date of issue, licensing authority.....
(Photocopy attached) and/or
- * PAN..... and/or
- * Other proof of identity and address.....

¹⁹Form 1B inserted vide Gazette notification, dated 4th August 2008

I submit the following as evidence of being married to the recipient:-

(a) A certified copy of a marriage certificate

OR

(b) An affidavit of a 'near relative' confirming the status of marriage to be sworn before Class-I Magistrate/Notary Public.

(c) Family photographs

(d) Letter from member of Gram Panchayat/Tehsildar/Block Development Officer/MLA/MP certifying factum and status of marriage.

OR

(e) Other credible evidence

I solemnly affirm and declare that:

Sections 2,9 and 19 of The Transplantation of Human Organs Act, 1994 have been explained to me and I confirm that:

1. I understand the nature of criminal offences referred to in the sections.
2. No payment of money or money's worth as referred to in the Sections of the Act has been made to me or will be made to me or any other person.
3. I am giving the consent and authorisation to remove my..... (organ) of my own free will without any undue pressure, inducement, influence or allurement.
4. I have been given a full explanation of the nature of the medical procedure involved and the risks involved for me in the removal of my.....(organ). That explanation was given by(name of registered medical practitioner).
5. I understand the nature of that medical procedure and of the risks to me as explained by that practitioner.
6. I understand that I may withdraw my consent to the removal of that organ at any time before the operation takes place.
7. I state that particulars filled by me in the form are true and correct to my knowledge and nothing material has been concealed by me.

.....

.....

Signature of the prospective donor

Date

Note:—To be sworn before Notary Public, who while attesting shall ensure that the person/persons swearing the affidavit(s) signs(s) on the Notary Register, as well.

* ✓ wherever applicable.

²⁰FORM 1(C)

(Page 1 of 2)

(To be completed by the prospective un-related donor) (See Rule 3)

My full name is.....
and this is my photograph

Photograph of the Donor
(Attested by Notary Public)

To be affixed
and
attested by
Notary
Public after it is
affixed.

My permanent home address is.....

.....Tel: My present
home address is

.....
.....Tel: Date of birth
.....(day/month/year)

* Ration/Consumer Card number and Date of issue & place:..... (Photocopy attached)

and/or

* Voter's I-Card number, date of issue, Assembly Constituency..... (Photocopy attached)

and/or

* Passport number and country of issue (Photocopy attached)

and/or

* Driving Licence number, Date of issue, licensing authority..... (Photocopy attached)

and/or

* PAN..... and/or

* Other proof of identity and address.....

Details of last three years income and vocation of donor.....

.....
.....

²⁰ Form 1C inserted vide Gazette notification, dated 4th August 2008

I hereby authorize to remove for therapeutic purposes/consent to donate my.....(state which organ) to a person whose fully name is and who was born on

.....(day/month/year) and whose particulars are as follows:

Photograph of the Recipient
(Attested by Notary Public)

To be affixed
and attested
by Notary
Public after it is
affixed.

- * Ration/Consumer Card number and Date of issue & place:.....
(Photocopy attached)
and/or
- * Voter's I-Card number, date of issue, Assembly Constituency..... (Photocopy attached)
and/or
- * Passport number and country of issue..... (Photocopy attached)
and/or
- * Driving Licence number Date of issue, licensing authority..... (Photocopy attached)
and/or
- * PAN..... and/or
- * Other proof of identity and address.....

I solemnly affirm and declare that:

Sections 2, 9 and 19 of The Transplantation of Human Organs Act, 1994 have been explained to me and I confirm that:

1. I understand the nature of criminal offences referred to in the Sections.
2. No payment of money or money's worth as referred to in the Sections of the Act has been made to me or will be made to me or any other person.
3. I am giving the consent and authorisation to remove my..... (organ) of my own free will without any undue pressure, inducement, influence or allurement.
4. I have been given a full explanation of the nature of the medical procedure involved and the risks involved for me in the removal of my.....(organ). That explanation was given by(name of registered medical practitioner).
5. I understand the nature of that medical procedure and of the risks to me as explained by that practitioner.
6. I understand that I may withdraw my consent to the removal of that organ at any time before the operation takes place.
7. I state that particulars filled by me in the form are true and correct to my knowledge and nothing material has been concealed by me.

.....
Signature of the prospective donor

.....
Date

Note:—To be sworn before Notary Public, who while attesting shall ensure that the person/persons swearing the affidavit(s) signs(s) on the Notary Register, as well.

- * wherever applicable.

21FORM 2

[See rule 4(1) (b)]

(To be completed by the concerned Medical Practitioner)

I, Dr..... possessing qualification of.....registered as medical practitioner at serial noby the.....Medical Council, certify that I have examined Shri / Smt./Km.S/o, D/o., W/o Shri..... agedwho has given informed consent about donation of the organ, namely (name of the organ).....to Shri/Smt./Km.who is a 'near relative', of the donor/other than near relative of the donor; who had been approved by the Authorisation Committee/Registered Medical Practitioner i.e. Incharge of transplant centre (as the case may be) and that the said donor is in proper state of health and is medically fit to be subjected to the procedure of organ removal.

Place:

.....
Signature of Doctor

Date:

Seal

To be affixed
(pasted) and attested
by the doctor
concerned.

The signatures and
seal should partially
appear on photograph
and document without
disfiguring the
face in
photograph.

To be affixed
(pasted) and attested
by the doctor
concerned.

The signatures and
seal should partially
appear on photograph
and document without
disfiguring the
face in
photograph.

Photograph of the Donor
(Attested by doctor)

Photograph of the recipient
(Attested by the doctor)

²¹ Form 2 substituted vide Gazette notification dated 4th August 2008

²² FORM 3

[See Rule 4(1) (C)]

I, Dr./Mr./Mrs..... working as..... at
.....and possessing qualification of.....certify that Shri/ Smt/
Km.....S/o, D/o, W/o Shri/Smt. aged.....the donor and
Shri/Smt..... S/o, D/o, W/o.
Shri/Smt.....aged.....the proposed recipient of the organ to be donated by the said donor are
related to each other as brother/sister/mother/father/son/daughter as per their statement and the fact
of this relationship has been established not established by the results of the tests for Antigenic Products of the Human
Major Histocompatibility Complex. The results of the tests are attached.

Place

Signature

Date

(To be signed by the Head of the Laboratory) Seal

²² Form 3 substituted vide Gazette notification dated 4th August 2008

FORM 4

[See Rule 4(1) (d)]

I, Dr./Mr./Mrs.....possessing qualification of
.....registered as medical practitioner at Serial No.....by
the.....Medical Council, certify that:—

(i) Mr.....S/o..... aged.....resident of.....
and Mrs D/o, W/o aged resident of are related to each other as spouse
according to the statement given by them and their statement has been confirmed by means of following evidence
before effecting the organ removal from the body of the said Shri/Smt/
Km.....(Applicable only in the cases where considered necessary).

OR

(ii) The Clinical condition of Shri/Smt mentioned above is such that recording of his/her statement
is not practicable.

Place.....

Signature of Regd. Medical Practitioner

Date.....

FORM 5

[See Rule 4(2)(a)]

I.....S/o,D/o,W/o.....
.....aged.....resident of.....in the present of
persons mentioned below hereby unequivocally authorise the removal of my organ/organs,
namely,.....

Signature of Donor

(Signature)

Dated:

1.Shri/Smt./Km.....S/o,D/o,W/o.....

.....aged.....resident of..... (Signature)

2.Shri/Smt./Km.....S/o,D/o,W/o..... aged..... resident
of.....is a near relative to the donor as.....

Dated.....

FORM 6

[See Rule 4(2)(b)]

I.....S/o,D/o,W/o.....
aged.....resident of.....having lawful possession of the dead body of Shri/
Smt./Km.....S/o.D/o.W/o.....aged resident of..... having
known that the deceased has not expressed any objection to relative of the said deceased person has objection to any of
his/her organs being used for therapeutic purposes authorise removal of his/her body organs, namely.....

Dated

Signature

Place

Person in lawful possession of the dead body.

Address.....

.....

[See Rules 4(3)(a) and (b)]

We, the following members of the Board of medical experts after careful personal examination hereby certify that Shri/Smt./Km.....Aged about son of/wife of/daughter of..... Resident of..... is dead on account of permanent and irreversible cessation of all functions of the brain-stem. The tests carried out by us and the findings therein are recorded in the brain-stem death Certificate annexed hereto.

Dated.....

Signature.....

- 1. R.M.P.—Incharge of the Hospital
In which brain-stem death has occurred.
Appropriate
- 2. R.M.P. nominated from the panel of
Names approved by the Authority.
- 3. Neurologist/Neuro-Surgeon nominated
deceased from the panel of names
approved by the Appropriate Authority.
- 4. R.M.P. treating the aforesaid person.

BRAIN-STEM DEATH CERTIFICATE.

(A) PATIENT DETAILS.....

- 1. Name of the patient: Mr./Ms.....
S.O./D.O./W.O. Mr./Ms.....
Sex..... Age.....
- 2. Home Address:
- 3. Hospital Number:
- 4. Name and Address of next of kin or person responsible
for the patient
(if none exists, this must be specified)
- 5. Has the patient or next of kin
agreed To any transplant?
- 6. Is this a Police Case? Yes.....No.....

(B) PRE-CONDITIONS:

1. Diagnosis: Did the patient suffer from any illness or accident that led to irreversible brain damage? Specify details.....
.....
..... Date and time of accident/onset of illness..... Date and onset of non-responsible coma.....

2. Findings of Board of Medical Experts:

(1) The following reversible causes of coma have been excluded: Intoxication (Alcohol)

Depressant Drugs

Relaxants (Neuromuscular blocking agents)

Examination

First Medical Examination

Second Medical Examination

1st

2nd

1st

2nd

Primary Hypothermia

Hypovolaemic shock

Metabolic or endocrine disorders

Tests for absence of brain-stem functions

(2) Coma

(3) Cessation of spontaneous breathing

(4) Pupillary size

(5) Pupillary light reflexes

(6) Doll's head eye movements

(7) Corneal reflexes (Both sizes)

(8) Motor response in any cranial nerve distribution, any responses to stimulation of face, limb or trunk. (9) Gag reflex

(10) Cough (Tracheal)

(11) Eye movements on coloric testing bilaterally. (12)

Apnoea tests as specified.

(13) Were any respiratory movements seen?

Date and time of first testing: Date and

time of second testing:

This is to certify that the patient has been carefully examined twice after an interval of about six hours and on the basis of findings recorded above, Mr./Ms.....is declared brain-stem dead.

1. Medical Administrator Incharge of the hospital 2. Authorised specialist.

3. Neurologis/Neuro-Surgeon

4. Medical Officer treating the Patient. Nb.

(I) The minimum time interval between the first testing will be six hours.

(II) No. 2 and No. 3 will be co-opted by the Administrator Incharge of the hospital from the Panel of experts approved by the appropriate authority.

FORM 9

[See Rule 4 (3) (b)]

I, Mr./Mrs.....son of/wife of.....Resident of hereby authorise removal of the organ/organs, namely,.....for therapeutic purpose from the dead body of my son/daughter Mr/Mrs..... aged.....whose brain-stem death has been duly certified in accordance with the law.

Signature

Name

Place

Date

²⁴FORM 10

(Page 1 of 2)

APPLICATION FOR APPROVAL FOR TRANSPLANTATION (LIVE DONOR)

(To be completed by the proposed recipient and the proposed donor)

[See Rule 4 (1) (c)(d)(e)].

To be self attested across the affixed photograph.

To be self attested across the affixed photograph.

Photograph of the Donor (Self-attested)

Photograph of the recipient (Self-attested)

Whereas I S/o, D/o, W/o Shri/Smt.....aged residing at.....have been advised by my doctor.....that I am suffering from.....and may be benefited by transplantation ofinto my body.

And whereas I S/o, D/o, W/o. Shri/Smt.....aged residing at.....by the following reason(s):—

(a) by virtue of being a near relative i.e.....

²⁴ Form 10 substituted vide Gazette notification dated 04-08-2008

(b) by reason of affection/lattachment/other special reason as explained below :—

.....
.....
.....

I would therefore like to donate my (name of the organ).....to
Shri/Smt.....

We.....and..... (Donor)
..... (Recipient)

hereby apply to Authorization Committee for permission for such transplantation to be carried out.

We solemnly affirm that the above decision has been taken without any undue pressure, inducement, influence or allurement and that all possible consequences and options of organ transplantation have been explained to us.

Instructions for the applicants:—

1. Form 10 must be submitted along with the completed Form 1 (A), or Form 1 (B) or Form 1 (C) as may be applicable.
2. The applicable Form i.e., Form 1 (A) or Form 1 (B) or Form 1 (C) as the case may be, should be accompanied with all documents mentioned in the applicable form and all relevant queries set out in the applicable form must be adequately answered.
3. Completed Form 3 to be submitted along with the laboratory report.
4. The doctor's advice recommending transplantation must be enclosed with the application.
5. In addition to above, in case the proposed transplant is between unrelated persons, appropriate evidence of vocation and income of the donor as well as the recipient for the last three years must be enclosed with this application. It is clarified that the evidence of income does not necessarily mean the proof of income tax returns, keeping in view that the applicant(s) in a given case may not be filing income tax returns.
6. The application shall be accepted for consideration by the Authorisation Committee only if it is complete in all respects and any omission of the documents or the information required in the forms mentioned above, shall render the application incomplete.
7. As per the Supreme Court's judgement dated 31-03-2005, the approval/No Objection Certificate from the concerned State/Union Territory Government or Authorisation Committees is mandatory from the domicile State/Union Territory of donor as well as recipient. It is understood that final approval for transplantation should be granted by the Authorisation Committee/Registered Medical Practitioner i.e., Incharge of transplant centre (as the case may be) where transplantation should be done.

We have read and understood the above instructions.

Signature of the Prospective Donor	Signature of Prospective Recipient
Date:	Date:
Place:	Place:

FORM 11

APPLICATION FOR REGISTRATION OF HOSPITAL TO CARRY OUT ORGAN TRANSPLANTATION

To

The Appropriate Authority for organ transplantation
(State of Union Territory)

We hereby apply to be recognised as an institution to carry out organ transplantation. The required data about the facilities available in the hospital are as follows:

(A) Hospital:

1. Name:
2. Location:
3. Government/Private:
4. Teaching/Non-teaching:
5. Approached by:

Road:	Yes	No
Rail:	Yes	No
Air:	Yes	No

6. Total bed strength:
7. Name of the disciplines in the hospital:
8. Annual budget:
9. Patient turn-over/year:

(B) Surgical Team:

1. No. of beds:
2. No. of permanent staff members with their designation:
3. No. of temporary staff with their designation:
4. No. of operations done per year:
5. Trained persons available for transplantation (Please specify Organ for transplantation):

(C) Medical Team:

1. No. of beds:
2. No. of permanent staff members with their designation:
3. No. of temporary staff members with their designation:
4. Patient turnover per year:
5. No. of potential transplant candidates admitted per year:

(D) Anaesthesiology:

1. No. of permanent staff members with their designations:
2. No. of temporary staff members with their designations:
3. Name and No. of operations performed:
4. Name and No. of equipments available:
5. Total No. of operation theatres in the hospital:
6. No. of emergency operation-theatres:
7. No. of separate transplant operation theatre:

(E) I.C.U./H.D.U. Facilities:

1. I.C.U./H.D.U. facilities: Present.....Not present.....
2. No. of I.C.U. beds:
3. Trained:—
Nurses:
Technicians:
4. Name and member of equipments in I.C.U.

(F) Other Supportive Facilities :

Data about facilities available in the hospital:

(G) Laboratory Facilities :

1. No. of permanent staff with their designations:
2. No. of temporary staff with their designations:
3. Names of the investigations carried out in the Dept.:
4. Name and number of equipments available:

(H) Imaging Services:

1. No. of permanent staff with their designations:
2. No. of temporary staff with their designations:
3. Names of the investigations carried out in the Dept.:
4. Name and number of equipments available: .

(I) Haematology Services :

1. No. of permanent staff with their designations:
2. No. of temporary staff with their designations:
3. Names of the investigations carried out in the Dept.
4. Name and number of equipments available:

(J) Blood Bank Facilities : Yes..... No

(K) Dialysis Facilities : Yes No

(L) Other Personnel :

- | | |
|--------------------|--------|
| 1. Nephrologist | Yes/No |
| 2. Neurologist | Yes/No |
| 3. Neuro-Surgeon | Yes/No |
| 4. Urologist | Yes/No |
| 5. G.I. Surgeon | Yes/No |
| 6. Paediatrician | Yes/No |
| 7. Physiotherapist | Yes/No |
| 8. Social Worker | Yes/No |
| 9. Immunologists | Yes/No |
| 10. Cardiologist | Yes/No |

The above said information is true to the best of my knowledge and I have no objection to any scrutiny of our facility by authorised personnel. A Bank Daft/cheque of Rs. 1,000/- is being enclosed.

Sd/-
HEAD OF THE INSTITUTION

F
O
R
M

1
2

CERTIFICATE OF
REGISTRATION

This is to certify that Hospital located at has been inspected by the Appropriate Authority and certificate of registration is granted for performing the organ transplantation of the following organs:—

1.
2.
3.
4.

4. This certificate of registration is valid for a period of five years from the date of issue.

Signature

Signature.....

F
O
R
M

-
1
3

[See sub-
rule 8
(2)]

OFFICE OF THE APPROPRIATE
AUTHORITY

This is with reference to the application datedFrom..... (Name of the hospital) for renewal of certificate of registration for performing organ transplantation, under the Act.

After having considered the facilities and standards of the above-said hospital, the Appropriate Authority hereby renews the certificate of registration of the said hospital for the purpose of performing organ transplantation for a period of five years.

Appropriate Authority

..... Place

.....
..... Date
.....
.....

V.K.
Subb
uraj,
*Principal Secretary to
Government.*

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PRINTING, CHENNAI
ON BEHALF OF THE GOVERNMENT OF
TAMIL NADU

Annexure 6

Guide for using online forms and waitlist registry

On how to register your hospital with the Network

- 1) The first step is to send to the Convenor, Cadaver Transplant Program a letter stating that you would like to be a member of the Tamil Nadu Network for Organ Sharing and attach a D/D for Rs.10,000/- (Rupees Ten Thousand) drawn in favour of “TNMSC - Organ Transplant”, as initial admission fee. The letter should be from the head of your hospital and should give the name and contact particulars of the head, the name and contact particulars of your transplant coordinator or any other nodal person who must be available 24x7 and an Email address authorized by you as the official communication channel with the Convenor. A copy of the certificate approving your hospital as a Transplant Centre should be enclosed.
- 2) Then go to the website www.dmrhs.org and click on the link “Online Waiting List”. In the window that opens, click on “Add your hospital details” and fill up the following online form that opens.

Add Hospital Details	
Name of the hospital *	<input type="text"/>
Address line1 *	<input type="text"/>
Address line2	<input type="text"/>
City *	<input type="text"/>  <input type="checkbox"/> Add your City if not Listed <input type="text"/>
State *	<input type="text"/> 
Telephone Landline No. 1 * (Country Code / City Code / Number)	<input type="text" value="91"/> <input type="text"/> <input type="text"/>
Telephone Landline No. 2 (Country Code / City Code / Number)	<input type="text" value="91"/> <input type="text"/> <input type="text"/>
Hospital fax number	<input type="text"/>
Name of the hospital director *	<input type="text"/>
Cell no / contact no *	<input type="text"/>
E-mail Id1 *	<input type="text"/>
E-mail Id2	<input type="text"/>

Hospital website address	<input type="text"/>
Is your transplant registration licence active?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Date of expiry of licence	<input type="text"/> <input type="text"/> <input type="text"/>
Certificate number	<input type="text"/>
Name of the transplantation coordinator *	<input type="text"/>
Cell number	<input type="text"/>
Name of contact consultants *	consultan1 <input type="text"/> cell number <input type="text"/>
	consultan2 <input type="text"/> cell number <input type="text"/>
	consultan3 <input type="text"/> cell number <input type="text"/>
	consultan4 <input type="text"/> cell number <input type="text"/>
(Please note that two of these numbers should be accessible 24/7)	
<input type="button" value="Submit"/>	<input type="button" value="Reset"/>

The fields marked with asterisk should not be left blank. Please ensure that the Email id (Email id 1) you enter in this form is the same as the Email address you have given in the above letter to the Convenor. After you submit the first window, a second window will open where your email address will be shown as your Login ID and Password left blank; you can enter your chosen Password and submit.

- 3) After the Convenor's office receives your letter and D/D, you will receive an Email communication approving your membership and authorizing you to access the other fields on that website using your Login ID and Password. (Please ensure that this Password is known to only key persons in your organization and is used with caution and responsibility.)

On how to enter your Kidney recipient waitlist data and maintain it:

- 1) When you are ready with your waitlist of patients to be uploaded, go to www.dmrhs.org and click on Online Waiting List (or go directly to www.tnos.org) and enter your approved Login ID and Password and submit. In the window that opens, click Patient Details Maintenance and in the next window, click Add New Patient Waiting Details. In

the subsequent window, select Kidney under Select Organs and click Next. The following online form that opens should be filled in, one for each patient, and submitted.

Note: Please Register Only Indian Citizens

PATIENT WAITING LIST INFORMATION	
Date of first Dialysis *	<input type="text"/> <input type="text"/> <input type="text"/>
First Name (or) Given Name *	<input type="text"/>
Middle Name	<input type="text"/>
Last Name (or) Initial *	<input type="text"/>
Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female
Age *	<input type="text"/>
(or) Date of Birth *	<input type="text"/> <input type="text"/> <input type="text"/>
Father's Name *	<input type="text"/>
Address Line 1 *	<input type="text"/>
Address Line 2	<input type="text"/>
City *	<input type="text"/> <input type="checkbox"/> Add your City if not Listed
State *	Tamil Nadu <input type="text"/>
Pincode / Zip *	<input type="text"/>
Telephone Landline No. 1 * (Country Code / City Code / Number)	91 <input type="text"/> <input type="text"/>
Telephone Landline No. 2 (Country Code / City Code / Number)	91 <input type="text"/> <input type="text"/>
Cell Number	<input type="text"/>
Name of Consultant *	<input type="text"/>
Blood Group *	O+ <input type="text"/>

Tissue Type	HLA-A	<input type="text"/>	<input type="text"/>
	HLA-B	<input type="text"/>	<input type="text"/>
	HLA-DR	<input type="text"/>	<input type="text"/>
Virology Status - HbsAg	<input type="checkbox"/> Positive	<input checked="" type="checkbox"/> Negative	
Virology Status - HCV	<input type="checkbox"/> Positive	<input checked="" type="checkbox"/> Negative	
Virology Status - HIV	<input type="checkbox"/> Positive	<input checked="" type="checkbox"/> Negative	
EMERGENCY CONTACT INFORMATION			
Name *	<input type="text"/>		
Address Line 1 *	<input type="text"/>	<input type="checkbox"/>	Same as above
Address Line 2	<input type="text"/>	<input type="checkbox"/>	Same as above
City *	<input type="text"/>	<input type="checkbox"/>	Same as above
Telephone Landline No. (Country Code / City Code / Number)	1	<input type="text" value="91"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Same as above
Telephone Landline No. (Country Code / City Code / Number)	2	<input type="text" value="91"/> <input type="text"/> <input type="text"/>	<input type="checkbox"/> Same as above
Cell Number	<input type="text"/>	<input type="checkbox"/>	Same as above
<input type="button" value="Submit"/> <input type="button" value="Reset"/>			

Fields marked with asterisk should not be left blank. The dialysis start date to be entered will be the date of first dialysis or the earliest date on which dialysis was done within Tamil Nadu, if the first dialysis had taken place outside the state.

- Once you have entered your patients' details, you can go back to the window after the Login and click on View Patient Waitlist Information. In the next window, if you choose the All Groups option you will see your full list in the following headings. By clicking on the View link against each patient, you can view the other details you had entered regarding that patient. If, for any reason, the patient is not temporarily available for transplant surgery, click on the last column, Make Inactive. The patient row will then become highlighted in colour. As you can see, patients 2&3 here have been inactivated in this sample table. They can be reactivated any time by clicking Make Active against their names.

Patient Waiting List

Sno	Name	Age	City	Organ	Blood Group	Hospital	Date of Dialysis	Option	Status
1	Raman	47	chennai	Kidney	B+	XX Hospital	9/23/2005	View	Make InActive Allocated
2	Krishnan	37	Kanchipuram	Kidney	A+	XX Hospital	12/16/2005	View	Make Active Allocated
3	Gomathi	55	chennai	Kidney	B+	XX Hospital	1/5/2006	View	Make Active Allocated
4	Lakshmi	49	thiruvallur	Kidney	O+	XX Hospital	3/9/2006	View	Make InActive Allocated
5	Murugan	31	chennai	Kidney	O+	XX Hospital	4/21/2006	View	Make InActive Allocated

4) The last column too shows an option 'Allocated', which you should click if that patient was allocated the organ and got transplanted. His name will be removed from the list.

5) In the page where you chose All Groups, you can also choose to view your list for each of the O, A, B and AB blood groups. The blood group page you view will be slightly different from the above, as follows: It shows an additional column, Zonal Rank, which gives the priority rank of that patient in the Combined List of all hospitals in that particular zone, according to the criteria followed for allocation of the Share Kidney. This is useful information. The first column, Serial No. automatically becomes priority ranking for the Hospital List for allocation of Local Kidney (subject to age group match), if the Hospital adopts the same criteria as for Share Kidney for prioritizing Local Kidney allocation.

Patient Waiting List

Sno	Zonal Rank	Name	Age	City	Organ	Blood Group	Hospital	Date of Dialysis	Status
1	9	Lakshmi	49	thiruvallur	Kidney	O+	XX Hospital	3/9/2006	Make InActive
2	14	Murugan	31	chennai	Kidney	O+	XX Hospital	4/21/2006	Make InActive
3	17	Kannan	20	Kanchipuram	Kidney	O+	XX Hospital	5/25/2007	Make InActive
4	23	Mala	63	chennai	Kidney	O+	XX Hospital	6/12/2007	Make Active

5	45	Rao	44	Chengal- pattu	Kidney	O+	XX Hospital	9/11/2008	Make InActive
---	----	-----	----	-------------------	--------	----	----------------	-----------	-----------------------------------

- 6) If you want to amend any data you have entered for a patient, click Patient Details Maintenance in the window after Login and click on Modify Existing Patient Details in the next window. Your patient list will open again, this time, with two options, Edit and Delete at the end of each row. If you click Delete, the patient will be removed from the List permanently. If you click Edit, the first form you filled for that patient will open with all data as you had filled; you can now change any data that needs to be changed and Submit.
- 7) In the window that opens after you log in, click 'View Organ Allocated Archive' to see the archive list of names that got deleted because organs were allocated to them or because you deleted their name for any other reason..

On how to estimate wait time of a patient

- 1) The wait time of a patient to get a Share Kidney donation depends on her effective Zonal Rank, the estimated future rate of donation in that Zone and the likely distribution of donors among blood groups. This is best explained through an example. If we take the North Zone, the rate of donation in the past has been of the order of 6 per month average. The blood group distribution among past donors has been 35% O, 37% B, 22% A and 6% AB.. Therefore, there is a probability of 35% of 6 or average 2.1 Share Kidney of O Group becoming available per average month in the North Zone. If we take 17th ranked Kannan in the above O list, he has to wait until the first 16 O group recipients have received the Share Kidney. This could take 16/2.1 or 8 months. However, experience shows that this person's effective rank is much better than 17, because more than half the Share Kidney offers made at a given time do not get taken due to various reasons and patients also get taken off the List as they get Local Kidney allocation or live organ transplant. Thus, the effective rank of this person could be less than half of 17 and he can expect to get a Kidney allotted in less than 3 months. Likewise, Rao, Rank 45 in that List can expect to get a Kidney in nine months or less. This applies to the middle age group. The Convenor can be contacted for inputs you may need to estimate for other zones and categories. . . .

On how to enter donor and recipient information:

- 1) After every organ donation, data on the donor has to be entered online. For this, go to <http://www.dmrhs.org/tnos/forms> and click on the link Brain Death Certification Details. Fill in the online form that opens and send. No logging in is required for this.
- 2) Likewise, data on organ recipients need to be entered by clicking on the link Enter Recipient Details.

Formats for these are under review now and are likely to be replaced by different online formats soon. The links for these will be intimated when ready.

Hospital Waitlist for Kidney

This is the in-hospital prioritisation list of patients that await Kidney transplantation. Each hospital is free to set its own criteria for prioritisation

of Local Kidney, state it in the space provided for it below and specify the prioritisation rank in the last but one column in the Tables.

Please ensure that all names on this List are already in the online entry made by you on the tnos.org website

Please fill in all columns. Please change the title of Col.D to name your applicable criterion (such as date of registration in your hospital)

and insert more columns after Col.D if there are additional criteria. Insert more rows to suit the list of patients.

If a patient is temporarily not available for surgery, please state that in the Remarks column.

This file is to be sent as email attachment to

organtransplant@gmail.com to reach the Convenor, Cadaver Transplant Program, Tamil Nadu.

Please keep this List updated at all time. Whenever a single change is made to the List, please mail the amended file

to the Convenor straightaway.

Any Local Kidney (donated by in-house donor) has to be allocated strictly to the highest ranked patient on this list

If donor-recipient age group matching is part of your prioritisation, allocation is to be made to the highest ranked in that age group.

If there has to be a deviation in this allocation procedure for any specific reason, this should be communicated to the Convenor immediately.

Name of Hospital:

Address:

Telephone Numbers, Email:

Transplant Coordinator Name, Phone and Email:

Other Contact Names, Numbers and Emails:

Any other information of relevance:

Criteria for prioritisation and allocation (Please explain in detail, including blood group policy):

Blood Group O

Sno	Recipient Name	Age	Criterion 1	Priority Rank	Remarks
-----	----------------	-----	-------------	---------------	---------

Blood Group A

Sno	Recipient Name	Age	Criterion 1	Priority Rank	Remarks

Blood Group B

Sno	Recipient Name	Age	Criterion 1	Priority Rank	Remarks

Blood Group AB

Sno	Recipient Name	Age	Criterion 1	Priority Rank	Remarks

Hospital Waitlist for Liver

This is the in-hospital prioritisation list of patients that await liver transplantation. Each hospital has to set its own criteria for prioritisation, state it in the space provided for it below and specify the prioritisation rank in the last but one column in the Table.

Please fill in all columns. You can change the title of Col.L and insert more columns after Col.L to provide additional information. If a patient is temporarily not available for surgery, please state that in the Remarks column.

This file is to be sent as email attachment to organstransplant@gmail.com to reach the Convenor, Cadaver Transplant Program, Tamil Nadu.

Please keep this List updated at all time. Whenever a single change is made to the List, please mail the amended file to the Convenor straightaway.

Any Local Liver (donated by in-house donor) or Share Liver (allocated from another hospital) has to be allocated strictly to the highest ranked patient on this list.

If there has to be a deviation in this allocation procedure for any specific reason, this should be communicated to the Convenor immediately.

xxxxxxxxxx

Name of Hospital:

Address:

Telephone Numbers, Email:

Transplant Coordinator Name, Phone and Email:

Other Contact Names, Numbers and Emails:

Any other information of relevance:

Criteria for prioritisation and allocation (Please explain in detail, including blood group policy):

LIVER WAITING LIST

S n o	Recipi ent Name	Ad dre ss	Conta ct phone	A ge	S e x	Regis ter date	Fail Org an	Bloo d grou p	Weig ht (Kgs)	Dis eas e	Medical conditio n	Con sulta nt	Cons . Mobi le	Priori ty Rank	Re mar ks

Hospital Waitlist for Heart

This is the in-hospital prioritisation list of patients that await liver transplantation. Each hospital has to set its own criteria for prioritisation, state it in the space provided for it below and specify the prioritisation rank in the last but one column in the Table.

Please fill in all columns. You can change the title of Col.L and insert more columns after Col.L to provide additional information. If a patient is temporarily not available for surgery, please state that in the Remarks column.

This file is to be sent as email attachment to organtransplant@gmail.com to reach the Convenor, Cadaver Transplant Program, Tamil Nadu.

Please keep this List updated at all time. Whenever a single change is made to the List, please mail the amended file to the Convenor straightaway.

Any Local Liver (donated by in-house donor) or Share Liver (allocated from another hospital) has to be allocated strictly to the highest ranked patient on this list.

If there has to be a deviation in this allocation procedure for any specific reason, this should be communicated to the Convenor immediately.

XXXXXXXXXX

Name of Hospital:

Address:

Telephone Numbers, Email:

Transplant Coordinator Name, Phone and Email:

Other Contact Names, Numbers and Emails:

Any other information of relevance:

Criteria for prioritisation and allocation (Please explain in detail, including blood group policy):

LIVER WAITING LIST

S. No	Recipient Name	Address	Contact phone	Age	Sex	Register date	Fail Organ	Blood group	Weight (Kgs)	Disease	Medical condition	Consultant	Cons. Mobile	Priority Rank	Remarks

Annexure 7

DECEASED DONOR TRANSPLANTATION, TAMIL NADU, TWO YEARS

Tamil Nadu's Cadaver Transplant Program completed two years by the end of September 2010. Its performance in Deceased Donor Transplantation, since the start of a state-wide program in October 2008 is as follows:

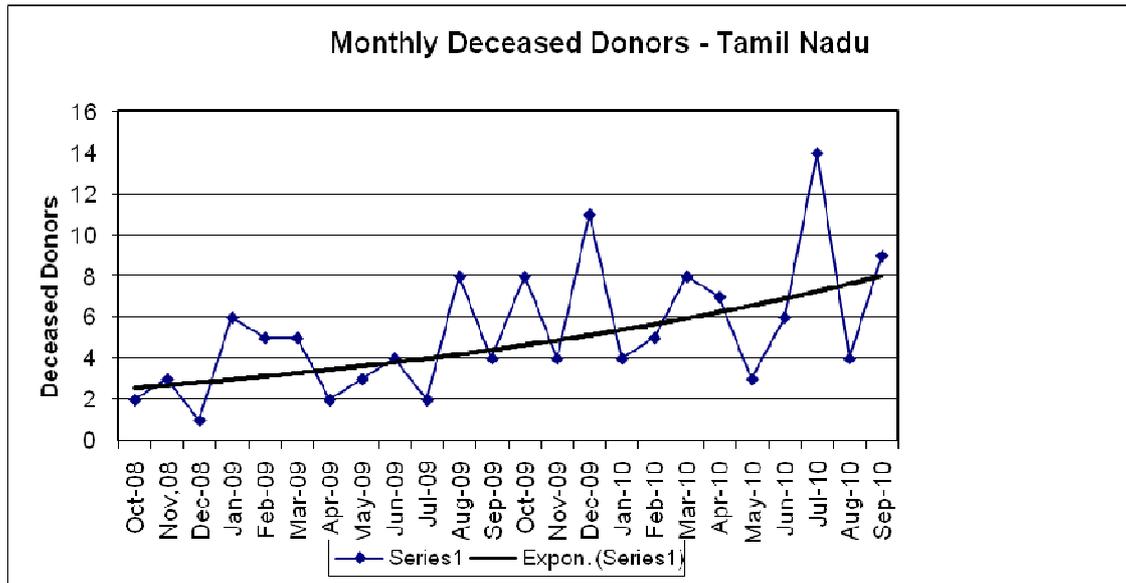
	Year 1 Oct 2008 – Sep 2009	Year 2 Oct 2009 – Sep 2010	Total
Donors	42	82	124
Heart	13	12	25
Lung	2	0	2
Liver	36	74	110
Kidney	84	152	236
Total Major organs	135	238	373
Heart Valve	32	110	142
Cornea	56	144	200
Skin	1	0	1
Total Organs	224	492	716

Above organs include 4 livers and 1 heart received from Karnataka and one liver shared to Karnataka. The numbers above show that an average of 3 major organs were taken from one donor. The second year saw a near doubling of donors compared to the first year.

A total of 27 hospitals participated in cadaver transplantation during the last two years, 26 of them in kidney transplant, 6 in liver transplant, 4 in heart transplant and 1 in lung transplant.

The percentage utilization of organs is 95% for kidneys, 85% for liver and 19% for heart. The underutilization of kidney and liver is due to medical unsuitability of the organ, while heart is very largely unutilized for want of recipients. This is in spite of the fact that the number of hospitals doing heart transplantation has increased from one to four during the two years.

The deceased donor trend is on the increase, as can be seen in this picture that shows the monthly donor arising over the two year period. There was a peak of 14 donors during the month of July, 2010.



Second Year performance

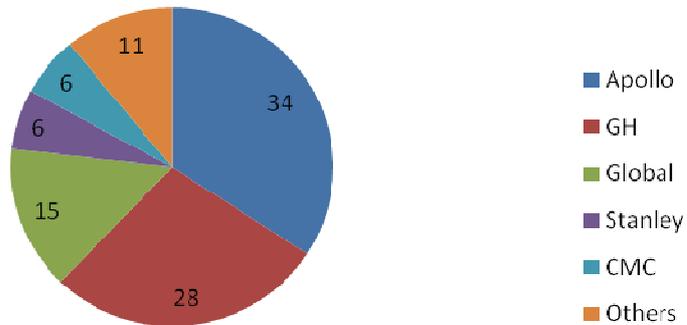
There were a total of 82 donors in the state during the second year. This amounts to 1.2 per million population per year, more than fifteen times that of the rest of the country, as estimated. (For comparison, the UK figure is 10 and of Thailand, 1.)

The donor arising by hospitals is highly skewed. Out of a total of 48 approved transplant centres in the State, just three accounted for more than three quarter donors and five accounted for almost 90% donors. 38 of the 48 hospitals did not have a single donor during the year.

Hospital wise deceased donors, Oct 2009 to Sep 2010

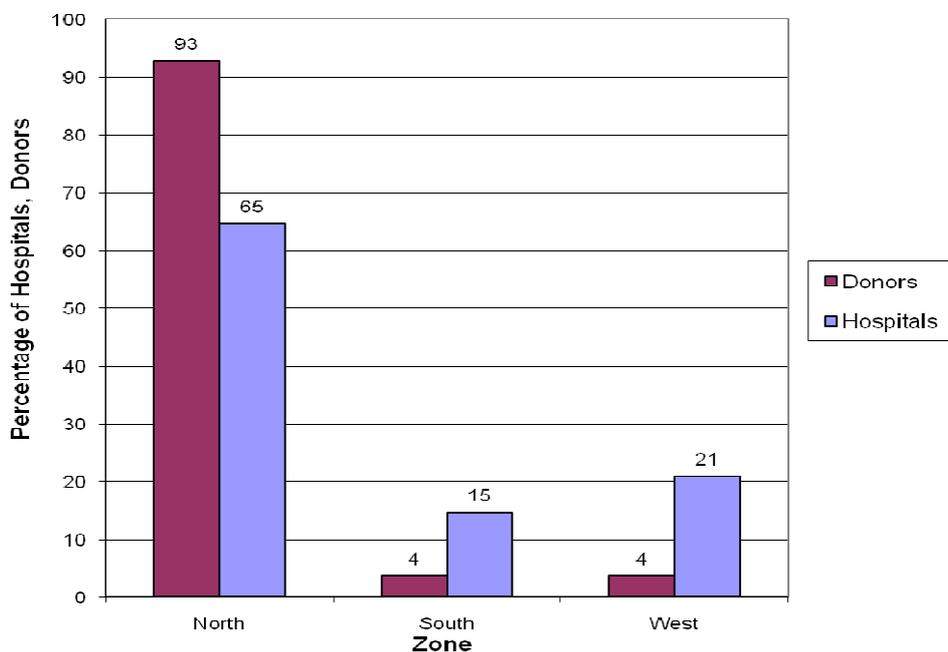
Hospital	Donors	% to total
Apollo	28	34
GH	23	28
Global	12	15
Stanley	5	6
CMC	5	6
Others (5)	9	11
	82	100

Donor ditribution by hospital, %, Oct 2009 to Sep 2010

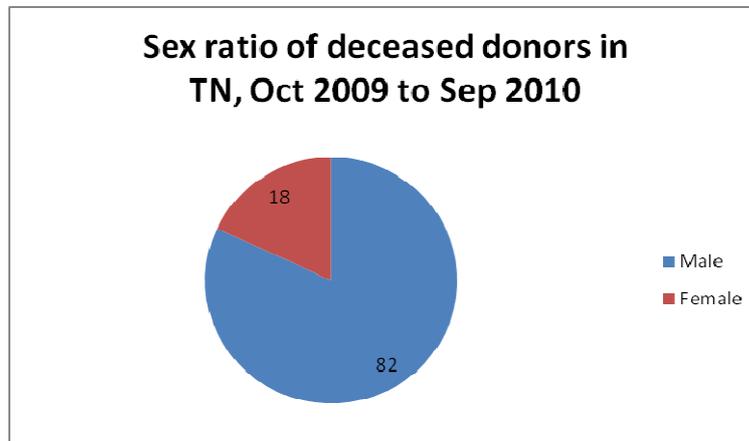


More skewed is the zonal distribution of donors. Of the total 82 donors, only three arose in the West Zone and three in the South. The rest were from the North Zone – Chennai and around and Vellore.

Zonal Distribution of Hospitals and Donors, Oct 2009 to Sep2010

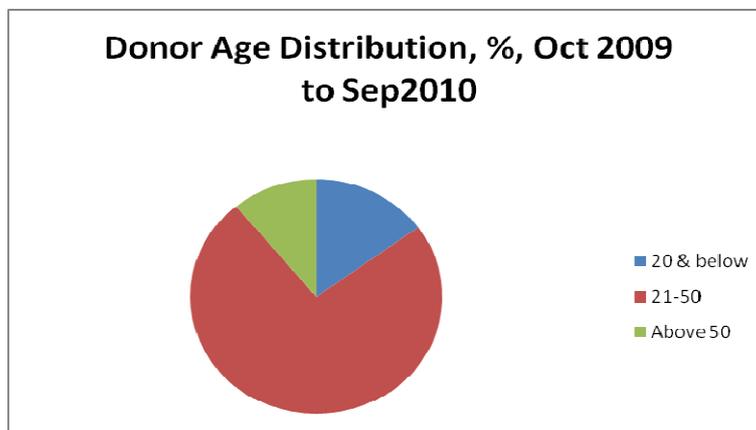


The sex ratio among the donors is also highly skewed. Only 18% of donors were female, 82% were male.



Donor age distribution shows that most were in the active age of 21-50. There were, however, much lesser percentage women in this category

Age	Male		Female		Total	
	Nos.	%	Nos.	%	Nos.	%
20 & below	8	12	4	27	12	15
21 – 50	54	81	7	46	61	74
Above 50	5	7	4	27	9	11
All	67	100	15	100	82	100

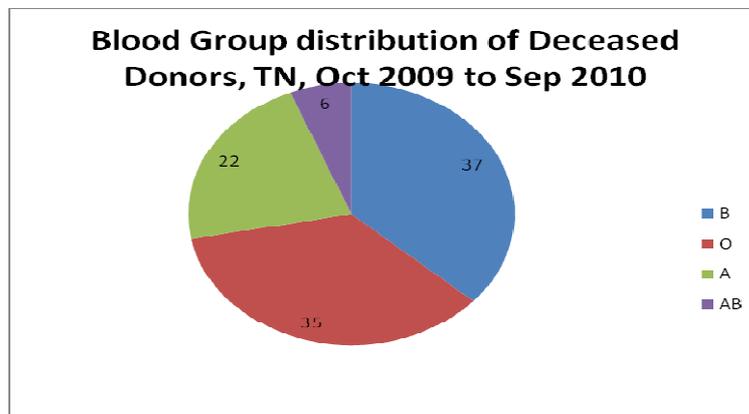


Among causes of brain death reported in 77 cases, 84% were reported as road traffic accidents or head injuries. 14% were due to intracranial bleed.

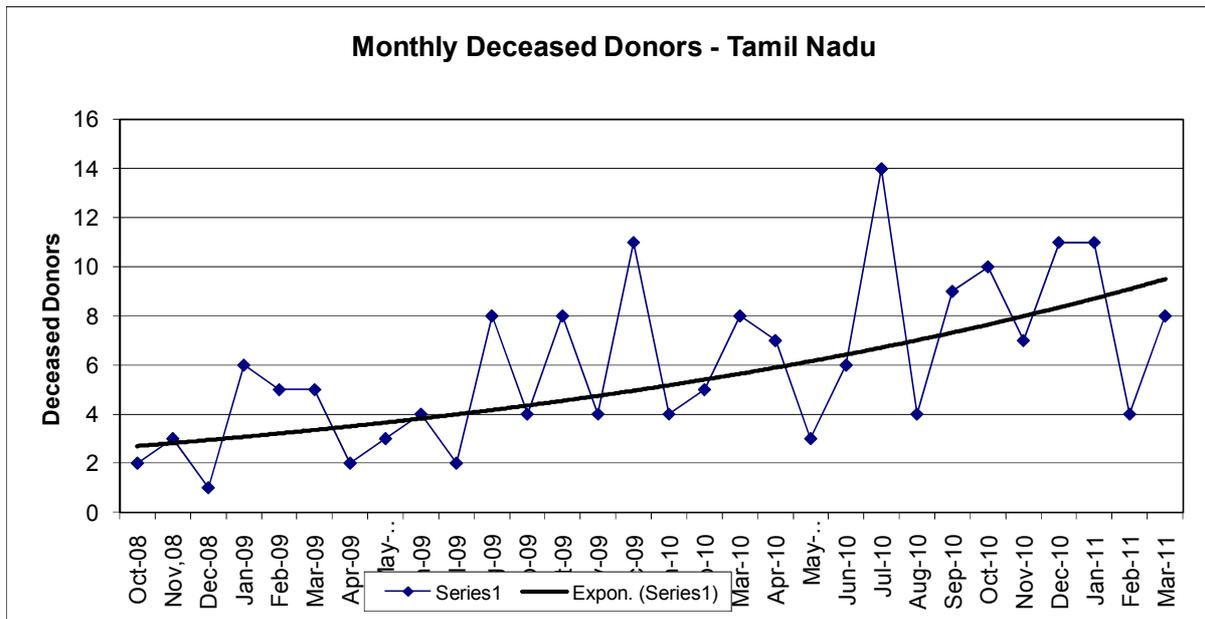
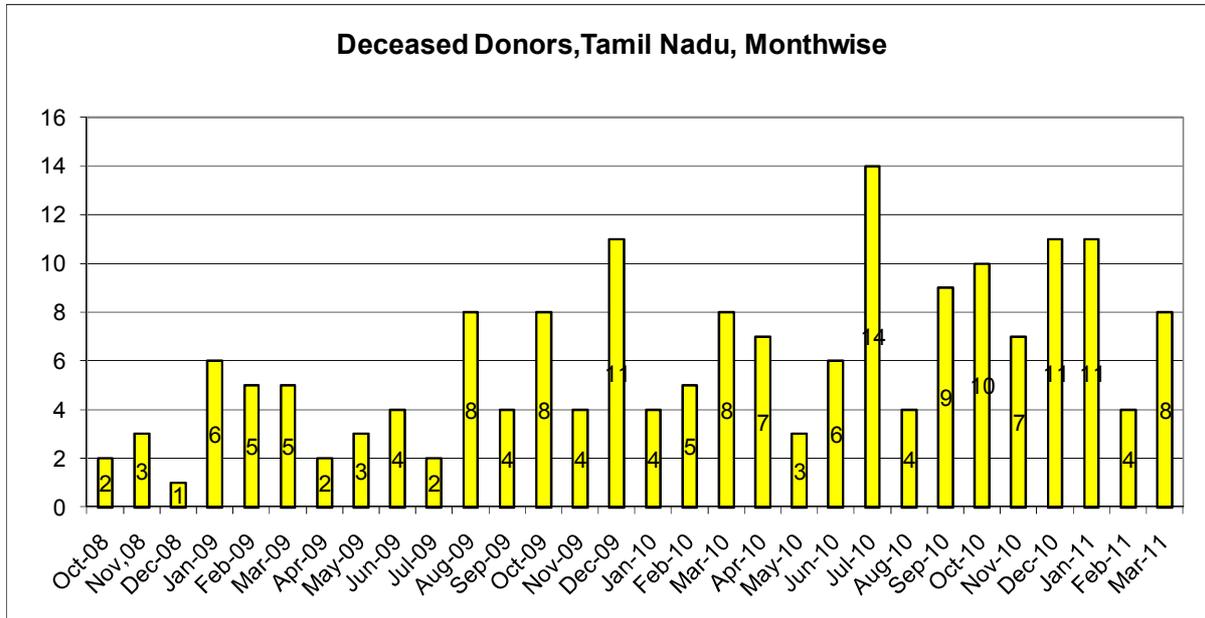
The blood group distribution of patients is as follows:

Blood group distribution of donors, Oct 2009 to Sep 2010

Blood group	Donors	% to total
B	30	37
O	29	35
A	18	22
AB	5	6
	82	



Deceased Donors, Tamil Nadu, Monthwise October 2008 to March 2011:



Organ sharing by hospitals, Oct 2008 to Mar 2011

The detailed sharing of organs for the full operational period of October 2008 to March 2011 is as follows:

Organs utilised by Transplant Hospitals in TN (Oct 2008 to Mar 2011)

KIDNEY	Stanley	Local	7
		Share	35
	GH	Local	33
		Share	24
	Apollo	Local	61
		Share	26
	Chettinad	Local	0
		Share	1
	ABC, Trichy	Local	8
		Share	7
	Madurai Meenakshi	Local	3
		Share	4
	CMC	Local	10
		Share	11
	Kumaran	Local	1
		Share	1
	SRMC	Local	3
		Share	13
	Galaxy	Local	1
		Share	0
	Kamakshi	Local	1
		Share	6
	Madurai Kidney Centre	Local	0
		Share	3
	Global	Local	15
		Share	3
	Kovai Medical Centre	Local	0
		Share	1

	KG, Coimbatore	Local	4
		Share	2
	Chennai Transplant Centre	Local	0
		Share	3
	Kilpauk Medical College	Local	0
		Share	1
	Chennai Kaliappa	Local	0
		Share	10
	Guest	Local	0
		Share	1
	Vijaya	Local	0
		Share	4
	Kidney Care, Tirunelveli	Local	2
		Share	1
	MIOT	Local	0
		Share	8
	Ramakrishna, Coimbatore	Local	1
		Share	2
	KMC, Trichy	Local	0
		Share	1
	Sundaram Medical	Local	0
		Share	3
	Malar	Local	0
		Share	2
	SPT	Local	0
		Share	1

LIVER	Chettinad	Local	0
		Share	3
	Apollo	Local	56
		Share	18
	CMC	Local	6
		Share	6
	Stanley	Local	5

		Share	18
	Global	Local	18
		Share	15
	SRMC	Local	2
		Share	5
	Out State	Share	2

HEART	Frontier Lifeline	Local	1
		Share	22
	Apollo	Local	4
		Share	1
	GH	Local	2
		Share	2
	Malar	Local	0
		Share	1
	Global	Local	0
		Share	1

TOTAL	Kidney	Local	150	
		Share	174	
	Liver	Local	87	
		Share	67	
	Heart	Local	7	
		Share	27	
			Total	512

Notes:

Local' refers to organs taken from in-house donors

Share' are organs received from outside. Second Kidney allocated to the same donor hospital is treated as 'Share'.

Share Heart total includes Lung

Of total above, 5 organs (1 Heart, 4 Liver) were received from Karnataka.

Above is from 179 donors, 4 of them from outside TN.

In addition to above, 279 Cornea, 216 heart valve and 1 skin donations were made.

The Financial Year ending March 2011 saw 94 donors from TN, almost 8 per month.

[Opinion- Leader Page Articles](#)

New lives out of deaths

V.K. Subburaj, P.W.C. Davidar, J. Amalorpavanathan and C.E. Karunakaran

Tamil Nadu shows the way in organ transplantation.

Performance of Tamil Nadu's cadaveric organ transplant programme

	Year 1	Year 2	Total
	Oct 2008 - Sept 2009	Oct 2009 - Sept 2010	
Donors	42	82	124
Heart	13	12	25
Lung	2	0	2
Liver	36	74	110
Kidney	84	152	236
Total major organs	135	238	373
Heart valve	32	110	142
Cornea	56	144	200
Skin	1	0	1
Total organs	224	492	716

Source: www.dmrts.org

If your liver has failed and you need a functioning organ to be transplanted for you to survive, and you do not have a close relative who matches your blood group and can give you a part of her liver, then go to Chennai: this is the buzz among liver-failure patients across India. In Chennai a patient stands a much better chance than anywhere else in the country of getting a liver offer from a brain-dead person, donated altruistically.

It is not as if brain-deaths do not occur elsewhere, or relatives there are not willing to donate. When the brain of a person irreversibly dies before the heart does, the heart function can be maintained for some hours through artificial breathing support; this gives a time window to obtain family consent for organ donation, decide on whom the organ should go to and get that person ready for urgent surgery. Major organs such as heart, liver and kidney have to be transplanted within a few hours of removal. Worldwide, such deaths account for roughly five per cent of all Intensive Care Unit (ICU) deaths in hospitals. Such brain-deaths occur all over India every day. Meanwhile organ failure patients too die every day, with the former's organs not reaching the latter.

But some of them are not lost in Tamil Nadu, where the myriad and complex issues

involved in converting a brain-death situation into an organ donation and transplantation situation have been addressed to a considerable extent, thanks to a combination of circumstances. The State has done 110 deceased donor liver transplantations in a period of less than two years. All other States put together have not done even half this number. Apart from liver, close to 240 kidneys and 25 hearts were transplanted from more than 120 donors. This is a donor rate of one per million population a year, which exceeds by 10 times the national average.

Tamil Nadu's Cadaver Transplant Programme completed two years by the end of September 2010. It was started as a State-wide programme in October 2008. The second year saw a near doubling of donors, to 82, compared to the first year. There was a peak of 14 donors during July 2010.

How did this come about? Is there a lesson from this that other States can learn from? Is this the most that can be achieved? These are questions that need answers in a country where medical skills for organ transplantation are fully available, but the potential for deceased donor organ donation remains untapped. In India, the demand for such organs, especially kidneys, far exceeds availability and consequently spurs illegal organ trade — the sale of a spare kidney from desperately poor live-donors.

It is primarily to prevent those from the economically weaker sections getting trapped into selling their kidneys as live 'donations' and to comply with the World Health Organisation guidelines, that India passed the Transplantation of Human Organs Act in 1994. The law was also meant to pave the way for deceased donor (or cadaveric) organ donation from brain-dead persons. Such deaths result largely from road accident head injuries or internal bleeding in the head. However, this law provided only an enabling provision for this purpose and needed to be supplemented with a comprehensive regulatory framework to make organ distribution possible in a fair manner. Countries that have a vibrant deceased-donor programme have a well-laid-out hospital coordination arrangement that makes possible the transfer of organs among hospitals — because a deceased organ donation may occur in one hospital and a patient in need of that organ may be in another.

Plagued as it was by repeated “kidney scandals”, Tamil Nadu took a decisive step some three years ago to set up such a coordination arrangement and to remove glitches in the way of a successful deceased-donor programme. A crucial element of this was a wide consultation process involving transplant hospitals at a workshop and rounds of discussion with smaller groups of medical professionals and voluntary organisations. This active involvement of stakeholders made possible the release of a series of government orders over a period of six months. These culminated in the appointment of a convener for the State's Cadaver Transplant Programme and the setting up of an advisory committee to oversee and support him.

In establishing such a framework, Tamil Nadu had advanced-country models as reference points. But it had to evolve its own model to suit the infrastructure, the social system and the learning curve differences. When a brain-dead person's organs get donated out of humanitarian concern, the issue of who among those waiting to get transplants should be

given the organs raises ethical and practical questions that have been debated in many countries. There is always a balance that needs to be established between different considerations such as how long a person has been waiting, how sick and in what dire need he/she is, and how long that organ will survive in that person if transplanted. There are also questions of how to motivate hospitals to sustain brain-dead donors, and logistics issues like the time involved in transporting the organ. Through a process of wide consultation, Tamil Nadu has been able to set up an acceptable framework that is still evolving as more experience is gained.

Organs donated altruistically by the family of the deceased really belong to society as a whole. These need to be distributed based on values that are generally acceptable to society at large if the framework established has to have long-term traction. One important result of this exercise is that despite the many complex and unforeseen issues that arise in the matter of actual coordination between hospitals, a basic trust now exists that the operation of the programme is authentic and fair and hospitals can participate freely without having to worry about the decisions taken. A contributing feature is the high level of transparency in the operation of the programme, with a website providing data to hospitals and members of the public (www.dmrhs.org).

Healthcare availability in India is skewed because of the substantial level of privatisation that has occurred over the years, and the skew is even more in the field of organ transplantation, as only a small segment of the population can afford the cost of transplant procedures in private hospitals. Tamil Nadu has taken some steps to restore the balance, with a framework that favours organ allocation to public hospitals. A third of all kidney transplantations done under the programme were by two government hospitals, out of a total of 26 hospitals that did them.

A total of 27 hospitals participated in cadaver transplantation during the last two years, 26 of them in kidney, six in liver, four in heart and one in lung transplantation. The percentage utilisation of organs is 95 per cent for kidneys, 85 per cent for liver and 19 per cent for heart. The under utilisation of kidney and liver is due to medical unsuitability of the organ, while heart is largely unutilised for want of recipients. This is in spite of the fact that the number of hospitals doing heart transplantation increased from one to four during the two years.

The second year's performance shows the donor numbers by hospital to be skewed. Out of a total of 48 approved transplant centres in the State, just three accounted for more than three-quarters of the donors and five accounted for almost 90 per cent. Of the 48 hospitals, 38 did not have a single donor. The sex ratio among the donors too has been skewed. Only 18 per cent were female, while 82 per cent were male. This probably reflects the fact that most brain-dead donors in the State were road traffic accident victims, and it is mostly men of working age that get involved in such accidents. Donor age distribution shows that most were in the active age group of 21-50.

Tamil Nadu is unique in another respect as well. This is the only State where government hospitals do liver and heart transplants free of cost, and immunosuppressant medication —

a costly burden for transplant receivers — is provided free for life.

But, the State has to go a long way still. Experience shows that Tamil Nadu currently taps only 10 to 20 per cent of the realisable potential that exists for such organ donations. More than two-thirds of donors have come from just four hospitals, including a government hospital. A key limiting factor appears to be lack of awareness and motivation within the hospital itself — among the management and staff. Added to it is the lack of soft infrastructure in hospitals — adequate skills and training in certifying brain-death according to procedure, maintaining the cadaver without medical complications until the time of organ retrieval and following regulatory procedures. Some hospitals in the State need help to tackle the dilemmas relating to allocation of scarce resources — ICU beds and costly equipment such as ventilators. Public and charitable hospitals face the dilemma on what to prioritise — whether a critically ill person whose immediate life-saving demands these resources, or whether a brain-dead cadaver should be preserved so that two to three organ-failed persons can be saved from future mortality.

All over India brain-deaths occur on the one side and organ failure patients die on the other. It is in the hands of governments and civil society to make the connection. Tamil Nadu has begun making that connection.

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A model programme

Tamil Nadu's positive experience with its two-year old cadaver transplant programme has an important message for all States: strong official policy and commitment to transparency can improve the availability of vital organs to save lives. Kidneys, livers, and hearts from brain-dead donors have provided a new life to several patients with organ failure. Remarkably, Tamil Nadu has made the transition from a State with rampant kidney commerce a few years ago to one with a nationally acknowledged deceased-donor transplant programme. Some key factors have helped turn the situation around and set new benchmarks. Chiefly, Tamil Nadu created a network for sharing of cadaver organs, administered by a designated coordinator and an advisory committee. It enlisted government and private hospitals to equitably share the available organs, and opened a patient registry that helps identify recipients. A significant contribution has been made to the process by organisations such as the Multi Organ Harvesting Aid Network (MOHAN) Foundation, which trains grief counsellors and raises awareness, and the National Network for Organ Sharing (NNOS). The overriding principle has been to utilise the organs of brain-dead patients through donation rather than let them be wasted. The efforts have paid off and families of brain-dead people have come forward in altruistic spirit to donate the organs of their kin. Quite remarkably, the donor rate of one per million population a year in the State is ten times the national average.

The case for a sound cadaver organ sharing system cannot be over emphasised. Over 90 per cent of people with end-stage renal failure, for instance, die within months of diagnosis. But for such a transplant programme to inspire confidence among donors, it is vital to treat organs as the property of society, with no possibility of exploitation and commerce. This can be done through a transparent system that makes the rules public and the implementation verifiable. The Tamil Nadu programme is noteworthy for its orientation towards poor patients in public hospitals. The costs of the transplant procedure and medications for a lifetime are fully met by the government in these institutions. Moreover, the active participation of private hospitals, which contribute to the common organ pool, has helped achieve good results. Commendably, during a one-year period from October 2009, Apollo hospitals contributed 34 per cent of the donors. A lot more can be done to improve local use of organs in far-flung areas. Provisioning major hospitals at the district level with the systems necessary to maintain cadavers and the expertise to perform transplants must be made a priority.© Copyright 2000 - 2009 The Hindu



National Network for Organ Sharing (NNOS)

Mission Statement:

To improve the quality of human life by maximizing the availability of deceased donor organs for transplantation through coordination efforts and to serve the community by promoting interest in organ and tissue donation programmes.

Structure and Function:

The National Network for Organ Sharing (NNOS) is a not-for-profit, non-governmental organization (NGO) established in 2005 to serve the cause of organ sharing, particularly deceased donor (cadaveric) organ sharing. In the relatively short period of its existence, NNOS has established a good working relationship with several hospitals – both government and private – and with the State government.

NNOS has at present 4 Trustees – all of them non medical professionals – a Medical Director and a Programme Director. The trust is headed by Dr. R Swaminathan, former Secretary, Asian Development Bank.

NNOS is a member of the National Deceased Donor Transplantation Network, an all India network of organizations involved in the promotion of Deceased Donor Transplantation in the country.

More on our organization is available at our website www.nnos.org .

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