## GOVERNMENT OF ANDHRA PRADESH <u>ABSTRACT</u>

HM&FW Dept. – The Andhra Pradesh Transplantation of Human Organs Act, 1995 and the Andhra Pradesh Transplantation of Human Organs Rules, 1995 – Cadaver Transplantation Advisory Committee – Report approved – Jeevandan Scheme Orders – Issued.

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HEALTH, MEDICAL & FAMILY WELFARE (M1) DEPARTMENT

<u>G.O.Ms.No. 184</u> <u>Dated: 16-08-2010.</u>

Read the following: -

1.G.O.Ms.No.107, HM&FW (M1) Department, dated: 18-03-1995. 2.G.O.Rt.No.1462, HM&FW(M1) Department, dated: 11.11.2009

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#### ORDER: -

Parliament had enacted the Human Organs Transplantation Act, 1994 with the objective of promoting and regulating the transplantation of human organs like kidney, liver and heart - both live as well as cadaver. The Legislative Assembly of Andhra Pradesh had also adopted the aforesaid Central Act in the form of Andhra Pradesh Transplantation of Human Organs Act, 1995. The Government of Andhra Pradesh had also framed the "Andhra Pradesh Transplantation of Human Organs Rules 1995", which, *inter-alia*, specify the duties of the authorities and also the formats for various purposes under the Act.

- 2. Despite the elapse of 14 years since the passing of the Act and Rules by the Legislature and Government, the number of transplantations occurring in the State, especially the "cadaver transplantations" have not increased significantly, primarily because of lack of a centralized coordination mechanism and the absence of a streamlined procedure for facilitating and regulating the cadaver transplantations on an end-to-end basis. With a view to give a fillip to the cadaver transplantations, the Government of Andhra Pradesh vide G.O. 2<sup>nd</sup> read above appointed a high level advisory committee called the **Cadaver Transplantation Advisory Committee (CTAC)** headed by the Principal Secretary, HM & FW Dept., and consisting of experts in the field of organ transplantation, with a direction to make its recommendations on the following aspects:
  - (a) Prescribing criteria for qualifications and experience of the Institutions to be eligible to be registered as Organ Transplantation Centers or organ harvesting centers in terms of the infrastructure, staff and other facilities.
  - (b) Evolving a mechanism for coordination of all the aspects relating to donation and transplantation of organs;
  - (c) Creation of a Registry (preferably on-line) for donations and potential recipients;
  - (d) Design of guidelines for allotment of organs, separately for kidney, liver and heart and for authorization of cadaver transplantations.
  - (e) Recommendations on the creation of an organizational structure for the Cadaver Transplantation Coordination Authority (CTCA) and its functions and powers along with financial implications in establishing the same.
- 3. The CTAC submitted its report to the Government on 27.04.2010 along with a set of recommendations. The CTAC observed that a large number of patients are suffering on account of irreversible organ ailments involving heart, liver, pancreas and kidney and a lot of them could lead healthy lives if they had the opportunity to have transplant surgery. Considering the ethical issues surrounding live and deceased donor organ donation, there is a need for streamlining procedures for Deceased Donor Organ Transplantation (DDOT), otherwise called "Cadaver Transplantation" in registered Government and Private Hospitals. Essentially the Committee recommended the introduction of a comprehensive scheme called "Jeevandan", which addresses the various issues relating to declaration of brain death, infrastructure, coordination and public awareness.

- **4.** Government after a careful consideration of the report of the CTAC, hereby approve the recommendations of the Committee and accordingly issue the following orders:-
- (i) The proposed Scheme for cadaver organ transplantation shall be called "Jeevandan", connoting donation of life.
- (ii) The Cadaver Transplantation Advisory Committee (CTAC) shall be the APEX level body charged with the responsibilities of policy design, monitoring and implementation oversight of the scheme of Jeevandan. The structure, functions and responsibilities of CTAC shall be as specified in Para 5.
- (iii) The legal authority for governing the various aspects like registration of hospitals and patients as well as allocation of organs and those relating to the organ transplantation shall be vested with the entity called the **Appropriate Authority** for **Cadaver Transplantation (AACT).** The structure, functions and responsibilities of AACT shall be as specified in Para 6.
- (iv) AP Network for Organ Transplantation (APNOS), shall be established to act as a virtual coordinating mechanism within the AACT, with the necessary infrastructure and governance structure for providing 24 x 7 services to the donors, recipients, hospitals, NGOs and the general public. The structure, functions and responsibilities of APNOS shall be as specified in Para 7.
- (v) The Non-Transplantation Organ Harvesting Centres (NTOHC) are hospitals registered as such, to play a pivotal role in the initial but critical stages like declaration of brain death, extraction of the organs and their storage and preservation. The infrastructure and manpower requirements as well as the functions and responsibilities of NTOHC shall be as specified in Para 9.
- (vi) The Organ Transplant Centres (OTCs) are hospitals registered as such to perform the most critical aspect of the Jeevandan scheme viz., undertaking of the actual transplantation for saving the lives of the recipients. The infrastructure and manpower requirement, functions and responsibilities of OTCs shall be as specified in Para 8.
- (vii) The success of the Jeevandan Scheme depends critically on sharing the real-time information about the availability of organs and allocating them to the needy patients with matching requirements. This shall be achieved through the establishment of a portal (<a href="www.jeevandan.org">www.jeevandan.org</a>) which will provide information and also alerts all the appropriate persons on a real time basis so as to facilitate the management of cadaver organ harvesting and transplantation on an end-to-end basis. In essence, the proposed portal shall ensure efficiency, effectiveness and transparency in the entire operations forming part of the Jeevandan scheme. The features of the proposed portal shall be as indicated in Para 10.
- 5. Cadaver Transplantation Advisory Committee (CTAC):
- **5.1.** The **Cadaver Transplantation Advisory Committee** (CTAC) shall be the APEX level body authorized to take appropriate managerial decisions in relation to implementing the Jeevandan Scheme.
- 5.2. The CTAC shall comprise of the following members:-

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1. Spl. Chief Secretary / Prl. Secretary / Secretary, HM & FW		Chairman
Director, Medical Education		Member
Superintendent, Osmania General Hospital		Member
4. Prof. of Surgical Gastroenterology, Osmania Medical College	e (OMC	C).Member
5. Professor of Nephrology, O.M.C.		Member
6. Professor of Urology, O.M.C.		Member
7. Superintendent, Gandhi General Hospital		Member
8. Professor of Nephrology, Gandhi Medical College		Member
9. Professor of Urology, KGH, Visakhapatnam.		Member
10. Professor of Nephrology, Kurnool Medical College		Member
11. Prof. of Urology/Nephrology, SVIMS, Tirupathi		Member
12. A representative of an NGO working in the area of		
Organ Transplantation to be nominated by the Govt.		Member
13. A Senior Police Officer of the rank of DIG or above		
to be nominated by the DGP		Member
14. Director, Nizam's Institute of Medical Sciences, Hyderabad.	Me	mber-Convener

The Committee can co-opt a multi-organ transplantation expert to advise it in the discharge of its functions.

## 5.3 Functions and responsibilities of CTAC:

The CTAC shall be responsible for the following:

- (i) Taking appropriate decisions on establishing and/ or managing various procedures, provisions and protocols relating to registration of NTOHC and OTCs, declaration of brain-stem death, harvesting of organs from the deceased persons, storage, preservation and transportation of organs for transplantation.
- (ii) Reviewing the performance of AACT, OTCs and NTOHCs atleast once in every 6 months.
- (iii) Making appropriate recommendations to the Government for sanction of funds for running of the Jeevandan Scheme.
- (iv) Providing appropriate guidance and issuing directions to the AACT as may be needed in the overall interest of implementation of Jeevandan Scheme;
- (v) Causing enquiries into the complaints and grievances arising out the implementation of the Scheme.

# 6. Appropriate Authority for Cadaver Transplantation (AACT):

**6.1.** The **Appropriate Authority for Cadaver Transplantation (AACT)** shall be the legal entity authorized with the statutory powers under the APTHOA 1995. It shall act as the Appropriate Authority under the Section 13 of the APTHOA 1995. It shall be housed in NIMS, Hyderabad.

## 6.2. Composition of AACT:

The composition of AACT shall be as shown below.

- (i) Director, Medical Education ... Chairman
- (ii) Director, NIMS, Hyderabad .. Co-Chairman
- (iii) Chief Transplantation Coordinator Member-Convener

AACT can co-opt another member who is a multi-organ transplantation expert to assist it, subject, however, to the condition that that such a person shall not have any affiliation to any hospital registered as a OTC or NTOHC.

#### 6.3. Functions and Responsibilities of AACT:

The AACT shall discharge the following functions and responsibilities

- (i) Registration of hospitals as NTOHCs or OTCs;
- (ii) Supervision and regulation of the functioning of NTOHCs and OTCs, including exercising the powers to suspend the registration in the event of any deviation or misconduct;
- (iii) Allocation of the organs available from cadavers to the registered patients (recipients) strictly following the priority laid down in this regard.
- (iv) Establishment and management of AP Network for Organ Sharing (APNOS):
- (v) Establishment, management and maintenance of Jeevandan Portal;
- (vi) Empanelment of specialists, especially in the specialties of Neuro Surgery, Neurology and Anesthesia, whose services can be availed by NTOHC or OTC to be a part of the Medical Board for the purpose of declaring brain death under the statute.
- (vii) Undertake programs to raise awareness in general public, such as mass media communication, conduct of annual events, establishing a system of online and postal pledging of organs by willing individuals in a central registry through Jeevandan portal, and issuing donor cards.
- (viii) Any other functions and responsibilities for the effective implementation of Jeevandan Programme.

#### 6.4. Staffing and infrastructure of AACT:

## (a) Staffing

The AACT shall be supported by appropriate staff to enable the authority to discharge its functions effectively. Jeevandan program shall be headed by the **Chief Executive Officer**, to be appointed by the AACT, and designated as **Chief Transplantation Coordinator (CTC)**. The CTC shall be responsible to discharge the day-to-day functions of the AACT, including, most importantly, the allocation of organs on a case-to-case basis, strictly conforming to the priorities laid down for the purpose and specified in Para 11.5.

The initial staffing of the AACT shall consist of, apart from the CTC, a senior medical professional conversant with the transplantation procedures and 3 administrative / financial officers.

#### (b) Infrastructure

The AACT shall have the following infrastructure:-

- (i) Office space of 2000 sft.
- (ii) 2 dedicated telephone lines
- (iii) Broad-band internet for online service
- (iv) IT infrastructure for management of Jeevandan Portal;
- (v) A Training Centre for training of transplantation coordinators, counselors, and specialists belonging to the NTOHCs and OTCs.

#### (c) Sub-Committees of AACT:

The AACT shall constitute 4 sub-committees consisting of experts from the respective areas to assist it in its functioning for allocation of:

- (i) Liver / Pancreas
- (ii) Heart / Lung
- (iii) Kidney
- (iv) Other organs

The sub-committees shall be required to make appropriate recommendations to the Chief Transplantation Coordinator for allocation of various organs in special situations and cases referred to them by the Chief Transplantation Coordinator, including those specified in Para 11.6. Any queries in allocation of organs even in regular situation can be referred to subcommittee for opinion.

## 7. AP Network for Organ Sharing (APNOS):

The AP Network for Organ Sharing (APNOS) shall be established as a virtual organization to be promoted by the AACT for achieving the overall convergence of the efforts of various agencies in the implementation of the Jeevandan Programme, to benefit thousands of patients suffering from organ failure. The APNOS may be registered as a Society with the members of the AACT as its Governing Body, in addition to 3 members, one each from among the OTCs, NTOHCs and NGOs. The following procedure shall govern the establishment and functions of the APNOS:

- (i) APNOS shall be registered as a Society with a corpus fund of Rs. 10 lakhs;
- (ii) The members of AACT shall be ex-officio members of the Society;
- (iii) Every hospital registered as NTOHC or OTC shall become a member of APNOS in order to avail services under the Jeevandan scheme:
- (iv) All the NGOs who intend to participate in the Jeevandan scheme, for training, counseling or for providing financial assistance to the deserving recipients shall also become members of the APNOS.
- (v) The APNOS shall charge the following membership fee:
  - a) OTC .. Rs. 1,00,000/b) NTOHC .. Rs. 5000/-
  - c) Recipient Registration fee.. Rs. 5,000/-Rs 10,000 and Rs 1000 shall be charged annually per OTC and NTOHC towards renewal of membership.

#### (vi) The APNOS shall undertake the following activities:

- (a) Formulation and undertaking of Training Programmes;
- (b) Advocacy and promotion;
- (c) Coordinating with various authorities for arranging railway / bus passes, health insurance, jobs as per eligibility to the members of the donors' family.

## 8. Organ Transplant Centre (OTC):

**8.1**. The **Organ Transplant Centre (OTC)** shall be a hospital with the stipulated infrastructure which has been legally authorized to undertake transplantation of human organs in terms of the APTHOA 1995 and the rules framed there under. An OTC automatically acts and discharges the functions of NTOHC specified in Para- 9.

#### 8.2. Registration of hospital as OTC

- (i) The AACT shall be the authority competent to register hospitals as OTCs
- (ii) The hospitals desirous to register themselves as OTC shall apply to the AACT in the prescribed format accompanied by a fee of Rs. 100,000.
- (iii) On receipt of the application from a hospital, the AACT shall cause inspection of the hospital by a team of specialists to satisfy itself, that the requirements for permitting establishment of OTC, shall be as specified in Para 6.4(c) exist in the applicant hospital.
- (iv) On satisfaction of the adequacy of the applicant-hospital with reference to the requirements, the AACT may register the hospital as OTC for a period of 5 years.

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(v) The AACT may renew the registration from time to time, each time for a period of 5 years, subject to the hospital paying a renewal fee of Rs.50,000/- and subject to the continued conformance to the requirements shall be as specified in Para 6.4(b).

## 8.3. Functions and Responsibilities of OTC:

The following are the functions and responsibilities of OTC:

- (i) Shall have its own waiting list for each organ, basing on the date of registration.
- (ii) Shall provide the prioritized waitlist of patients in each category mentioned above to 'Jeevandan' by posting the same in the Jeevandan portal.
- (iii) Shall update the list with Jeevandan portal, whenever a new patient is added.
- (iv) Ensure that the patients on the hospital waiting list for DDOT are promptly registered with 'Jeevandan'.
- (v) Shall promptly report all incidents of brain death declaration.
- (vi) Shall update recipient details of DDOT as well as Living donor Organ Transplantation (LDOT), within 48 hours of completion of procedure, in the Jeevandan portal.
- (vii) Shall take the responsibility of transporting the organ allocated to their center from another OTC or NTOHC. It is their responsibility to carry all equipment, preservation fluids (HTK, Renograph, UW solutions in sufficient quantity) and ice boxes to transport the organs to the allocated center.
- **8.4.** The OTC shall have the bed strength of a minimum 100 beds with the following departments:

## I. Common Requirement for all OTCs

- (i) Biochemistry/ Microbiology /Pathology/ Heamatology
- (ii) Radiology with Ultrasound Doppler, Flouroscopy, X ray
- (iii) Anesthesia
- (iv) Operation theatre /Intensive care department

# II. Specific Additional Requirement for OTCs specializing in transplantation of particular organs

#### A. For transplantation of Kidney

- (i) Nephrology
- (ii) Urology
- (iii) Dialysis

# B. For transplantation of Heart

- (i) Cardiothoracic Surgery
- (ii) Cardiology
- (iii) Blood Bank
- (iv) Dialysis
- (v) Cardiac ICU with Echocardiogram
- (vi) Cath laboratory

#### C. For transplantation of Liver

- (i) Surgical Gastroenterology/Hepatobiliary and Liver Transplant/
- (ii) Transplant surgery
- (iii) Anesthesia
- (iv) Blood Bank with facilities to Provide Screened blood and blood products (FFP, Platelets, Cryoprecipitate)
- (v) Dialysis
- (vi) Endoscopy

## 8.5. Equipment requirement of OTC:

The departments specified above shall be equipped with diagnostic and surgical facilities as per the norms established by MCI or as prescribed by the AACT from time to time.

## 8.6. Professional Staffing requirement of OTC:

The Organ Transplantation Centre shall mandatorily have the following specialists, apart from the required supporting staff:

(a) Kidney transplantation: M.Ch(Urology) or M.S (Gen)Surgery with three years' post M.S. training in a hospital in India or abroad registered for kidney transplantations and having attended to adequate number of renal transplantations as an active member of team.

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- (b) Transplantation of Liver & other abdominal organs: M.Ch/DNB (Surgical Gastro-enterology) or M.S./DNB (Gen) Surgery with 3 years' post MS /DNB training in Hepatopancreatobiliary and Liver /Pancreas transplant unit in a hospital in India or abroad registered for organ transplantations and having attended to adequate number of Liver /Pancreas transplantations 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 atleast 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) Support staff

- (a) Surgical staff
- (b) Cardiology staff
- (c) Nursing staff
- (d) Transplant Coordinator

## 9. Non-Transplantation Organ Harvesting Centre (NTOHC):

**9.1**. The primary purpose of establishing the **Non-Transplantation Organ Harvesting Centre (NTOHC)** is to create the facilities for retrieval of organs in a network of hospital with the appropriate authority of exercising all the functions relating to organ harvesting, when there is willingness among the relatives to donate the organs of a deceased person and thereby increase the number of organs available for transplantation. The NTOHC is a hospital which has been authorized by the competent authority to declare brain-death in respect of a person admitted to their hospital following the prescribed procedure, to perform the procedures relating to the removal of the donated organs and to store and arrange to transport them for the purpose of transplantation for therapeutic purposes in an authorized Organ Transplantation Centre (OTC).

#### 9.2. Registration of hospitals as NTOHC

The following procedure is prescribed for registration of Hospitals as NTOHC:

- (i) The AACT shall be the authority competent to register hospitals as NTOHCs
- (ii) The hospitals desirous to register themselves as NTOHC shall apply to the AACT in the prescribed format accompanied by a fee of Rs. 1000.
- (iii) On receipt of the application from a hospital, the AACT shall cause inspection of the hospital by a team of specialists to satisfy itself that the requirements for permitting establishment of NTOHC, specified in Paras 9.3 and 9.4 exist in the applicant hospital.
- (iv) On satisfaction of the adequacy of the applicant-hospital with reference to the requirements, the AACT may register the hospital as NTOHC for a period of 5 years.
- (v) The AACT may renew the registration from time to time, each time for a period of 5 years, subject to the hospital paying a renewal fee of Rs.1000/- and subject to the continued conformance to the requirements under Paras 9.3 and 9.3.

## 9.3. Infrastructure requirements for NTOHC

The following infrastructure shall be available in the hospital applying for registration as NTOHC:

- (i) A minimum bed strength of 100 beds;
- (ii) Operation theatre conforming to the specifications to be notified by the AACT.
- (iii) Intensive Care Unit conforming to the specifications to be notified by the AACT.
- (iv) Own ambulance
- (v) A room earmarked for grief counselor
- (vi) Blood bank or facilities to acquire blood products from recognized blood banks

#### 9.4. Manpower requirement

The following manpower shall be available in the hospital applying for registration as NTOHC

- (i) Medical Superintendent
- (ii) Neuro Surgeon (MCh Neurosurgery with 3 years of experience) on call
- (iii) Neurologist (DM (Neuro) with 3 years of experience)on call
- (iv) General Surgeon

- (v) Supporting Staff:
  - (a) 3 Staff Nurses (qualified in specialty nursing)
  - (b) 3 Technicians (qualified to operate equipment specified)
  - (c) Greif counselor/ Donor coordinator

## 9.5. Functions and Responsibilities of NTOHC

The following shall be the functions and responsibilities of a hospital registered as NTOHC:

- (i) Arranging for declaration of brain-stem death following the due procedure prescribed under Section 2 (d) and 2 (e) of the A.P. Transplantation of Human Organs Act, 1995.
- (ii) Conducting an appropriate counseling to the relatives of the deceased persons to enable them to take an appropriate decision on organ donation.;
- (iii) Notifying the admission of such critical patients to the AACT through the Jeevandan website::
- (iv) Instantaneously notify through the website of the Jeevandan Programme about the availability of donated organs for transplantation;
- (v) . Providing operating room, basic surgical equipment and nursing, medical and paramedical staff to assist the harvesting team
- (vi) Arranging for handing over of the donated organs to the team of specialists of the OTC or OTCs authorized by the AACT to receive the organs for transplantation
- (vii) Facilitating the conduct of postmortem simultaneously and the procedures relating to harvesting of the organs in medico legal cases.

#### 10. Jeevandan Portal:

The efficient and effective functioning of Jeevandan Scheme depends substantially on the Jeevandan Portal, which shall act as the back-bone for the scheme. The Portal shall be designed, got developed and maintained by the AACT. The following shall be the salient features and functional requirements of the proposed Portal.

- Receiving applications of hospitals for registration as NTOHC and OTC;
- (ii) Receiving applications for registration with the APNOS by OTCs, NTOHCs and NGOs;
- (iii) General information relating to various entities registered / participating in the activities relating to the Jeevandan Scheme.
- (iv) Online central registry of patients requiring organ transplantation along with details of hospitals where they are currently receiving the treatment and basic details for cross-matching of compatibility of the donor's organs.
- (v) Facility for the NTOHC / OTC for updating the availability of organs from cadaver
- (vi) Online workflow for allocation of organs to the registered patients strictly observing the priority prescribed under rules;
- (vii) Security of information
- (viii) Privacy of the personal data of patients and donors
- (ix) Details of training programs
- (x) Promotional information
- (xi) Technical information about the cadaver transplantation
- (xii) Information required by the RTI
- (xiii) Grievance Redressal module
- (xiv) MIS and Dashboard

#### 11. Procedures relating to Jeevandan Scheme:

11.1. It is absolutely essential to build and maintain transparency in all the activities and operations relating to the Jeevandan scheme, so as to generate the necessary confidence, credibility and trust among the donors as well as the recipients in particular and general public at large. This is possible only if the procedures and processes required to be fulfilled for organ donation and harvesting and transplantation are very precise, standards-based and simple to understand and implement. Accordingly, the following procedures are prescribed for the various steps involved in cadaver transplantation.

## 11.2. Declaration of brain death:

(a) The procedure prescribed under Section(3) & (4) of the APTHOA Act, 1995 shall be strictly followed;

- (b) The medical board comprising of the following members shall be constituted by the NTOHC or OTC as the case may be for the declaration of brain death, in each case:
  - (i) Medical Superintendent of the Hospital
  - (ii) An independent Registered Medical Practitioner, i.e. <u>Post graduate with 5 years post PG experience (Physician / Surgeon / Intensivist)</u> (specialist to be nominated by the Medical Superintendent of the Hospital from the panel of names approved by the AACT)
  - (iii) A Neurologist or Neurosurgeon (to be nominated by the Medical Superintendent of the Hospital from the panel of names approved by the AACT)
  - (iv) The doctor on-duty treating the patient

# 11.3 Other procedural requirements:

Post mortem and panchanama in case of Medico-legal cases to be done at the same place and the same time of harvesting. Availability of Police and Forensic experts round the clock shall be made mandatory for the smooth running of brain death organ donation process.

#### 11.4. Procedure for harvesting of the organs

The NTOHCs and OTCs shall adopt the procedure as specified below for harvesting of organs from a deceased person.

- (i) Form 6, as laid out in the A.P. Transplantation of Human Organs Rules 1995, shall duly be signed by the person(s) in possession of the brain dead patient. In the case of children below the age of eighteen years, the appropriate Form 9 of the Transplantation of Human Organs Rules, 1995 requires to be signed by the persons concerned before organ retrieval.
- (ii) Retrieval of organ(s) shall not be carried out on a brain dead patient merely due to an earlier declaration by the said patient in <u>Form 5</u> of the A.P. Transplantation of Human Organs Rules, 1995. While such a declaration shall presuppose the previous intention of the brain dead patient to donate the organ(s), consent in <u>Form 6</u> of the A.P. Transplantation of Human Organs Rules, 1995, is necessary to continue with the process of organ retrieval.

#### 11.5. Procedure for allocation of organs

Equitable allocation of organs harvested from deceased persons is critical to the effective functioning of the Jeevandan scheme. There are two dimensions to the process of allocation of organs – the administrative process and the technical process. These are specified below:

#### 11.5.1. Administrative process of allocation of organs:

- (i) All the prospective recipients of organs shall register themselves with the APNOS, in the prescribed format, through the Jeevandan portal, on payment of the registration fee of Rs.5,000/-. The application for registration of the recipients shall be counter-signed online by the OTC, where such patient receives or intends to receive treatment and to undergo the required transplantation.
- (ii) The NTOHCs shall notify the details of all the organs harvested from the deceased persons admitted to their hospitals.
- (iii) The Jeevandan portal shall have an appropriately designed application for matching the organs available from cadavers with the requirements of one or more recipients on the waiting list, strictly following the priority laid down in this section. It should also simultaneously send an alert to the Chief Transplantation Coordinator of AACT, legally assigned the responsibility of allocation of the organ.
- (iv) The allocation is done by the chief transplant coordinator strictly according to the criteria laid down in Para11.5.
- (v) Immediately after the allocation has been approved by the Chief Transplantation Coordinator of AACT, the Portal shall send appropriate communications and alerts to the recipient(s), the OTC(s) with which the recipient(s) is(are) registered for treatment/ transplantation, the NTOHC where the organ is available and all others concerned with the cadaver transplantation(s).
- (vi)The NTOHC and the OTC(s) shall update the progress of the cadaver transplantations within 24 hours at the Jeevandan portal.

## 11.5.2. Technical process (priorities) for allocation of organs:

The following priority shall be strictly followed for allocation of organs harvested from cadavers:-

- (1) First priority shall be given to the OTC where the deceased donor is located, for liver, heart and one kidney, except in special situations defined in this section. The other kidney and any other transplantable unutilized organs shall be allocated using criteria of allocation of <u>General pool</u> organs.
- (2) Second priority shall be given to the senior-most patient registered for the organ available, in the combined list of patients, in all the OTCs who are taking part in deceased organ donation transplant program (General Pool Criteria).
- (3) Third priority shall be give to the hospitals (OTCs) outside the State, provided earlier information and such a request has been registered with the APNOS.
- (4) Finally, if the organ(s) remains unutilized after exhausting all the above criteria, it may be offered to a foreign national registered in a Government or Private hospital within and then outside state
- (5) General pool:

Organs retrieved in following situations are defined as general pool

- A. Organs retrieved at non transplant centers (NTOHCs).
- B. Organs retrieved at transplant centers on deceased donors shifted from non-transplant centers (NTOHCs) either before or after brain death declaration.
- C. Retrieved organs unutilized at transplant center or the second kidney of deceased person declared brain-dead at an OTC.

The general pool organs shall be allocated according to the following criteria:

- (1) Heart/Lung will be allocated to the patients listed, as per date of their registration with Jeevandan.
- (2) Liver will be allocated to the patients listed, as per date of their registration with Jeevandan.
- (3) Kidney will be allocated to the patients listed, as per date of their registration with Jeevandan. There is no out of turn allocation for Kidney recipients.

## (6) Special situations for allotment:

#### (a) Multi-organ recipient

If there is a patient who is to be a multi organ recipient (Heart/Lung, Heart / Kidney, Liver /Kidney, Kidney/Pancreas) and a Matching (blood group and size) organ donor is available, then the multi organ recipient takes precedence over all others on the regular waiting list.

#### (b) Urgent Listings

Lifesaving organs, namely heart and liver may be listed as **Urgent** in certain situations. These conditions do not require a waiting time on the list and a respective committee will clear the urgent organ request.

#### Liver

- A. Hepatic Artery Thrombosis following a liver transplant.
- B. Primary Non function of a graft
- C. Fulminant hepatic failure (Kings College criteria)

#### Heart

- A. Patients with Left Ventricular Assist Device (LVAD).
- B. Followed by patients with Intra Aortic Balloon Pump (IABP)

The allocations under the category of 'Urgent Listings' shall have to be cleared by special committees constituted by AACT for the purpose.

**Heart committee**: A cardiologist and a cardiothoracic surgeon with transplant experience from Govt. /Private Institutions will form the committee and oversee the Urgent heart allocation.

**Liver committee**: Hepatoligist /Gastroenterologist/ Surgical Gastroenterologist with Liver transplant experience / Liver transplant surgeon from Govt. and private hospitals will oversee the urgent Liver allocations.

Note: Patients on the urgent list supersede the standard list and the hospital misses its regular turn on the rota.

#### (c) Child Deceased organ donors

In case of children below the age of eighteen years, the appropriate form mentioned in the APTHOA, 1995 requires to be signed by the persons concerned before organ retrieval. The organs thus retrieved from the Child deceased donor organs have to be offered to the children waiting for a deceased donor organ who are registered at Jeevandan.

#### 12. Promotion of Jeevandan Scheme:

One of the critical success factors for a scheme like Jeevandan is the increasing awareness and popular support. The general public at large should be addressed for a behavioral change so that there is more empathy to the idea behind the Jeevandan scheme. Such empathy would enable the relatives of the deceased donors to take a decision in favour of donation at the appropriate time. This would involve mass media campaign at the appropriate time during the early period of launch of Jeevandan scheme. The Director of Information and Public Relations (DIPR) shall design and implement appropriate media campaign for this purpose, in-consultation with AACT. Besides this, workshops and seminars shall be held in all the Medical Colleges and major hospitals both in Public and Private Sector.

#### 13. Transplantation Coordinators:

All the NTOHCs and OTCs shall have a full time Coordinator, who can be a doctor or nurse not directly involved in the retrieval/transplantation activities. The Transplantation Coordinator identified for each institution shall be got trained in communication skills and also handling the situation arising out of the proposed donation and transplantation. The coordinator shall develop rapport with the family members of prospective "Brain-death" patients; counsel them suitably on donation of organs. They shall also be responsible for sending a monthly report on prospective "Brain-death" patients.

## 14. Maintenance of Cadaver

A time period of a few hours / few days may elapse from the time of initiation of the process for declaration of brain death till the time the organs are harvested and the body handed over to the relatives. The cadaver has to be maintained by the NTOHC or OTC till such period. It may not be appropriate to charge from the relatives of the deceased in such cases. Therefore the hospital (NTOHC only) be compensated at Rs. 10,000/- per each day, counted from the date of declaration of brain death to the date of handing over the body to the relatives of the deceased donor. This will act as an incentive for the NOTHC to readily take up the cases which can prospectively become cases for cadaver transplantation and thus, increase the availability of organs in the State.

## 15. Counseling

Counseling plays a very critical role in enabling the relatives of the deceased persons to take a decision in favour of donation of the organ (s). Professionally trained counselors will have to be appointed at all the NTOHCs and OTCs, so as to be on-call. The expenditure relating to the appointment and maintenance of the counselors in respect of NTOHCs will have to be borne either by the hospital or by an NGO attached to the NTOHC. In this regard, it is desirable that each NTOHC shall necessarily be attached to one or more NGOs which can not only promote the concept of Jeevandan but also render critical service relating to counseling.

#### 16. Nodal Centers for training & awareness

- (a) Given the fact that the cadaver transplantation and Jeevandan scheme are being promoted newly in the State, it is necessary to undertake a systematic training for the Coordinators of NTOHCs and OTCs. Osmania Medical College (OMC) shall be the *Nodal place* for training of Coordinators. A team of three members shall be identified from the OMC and other public / private hospitals for training. The OMC shall run a two-day course once in two months with the help of the three faculty members.
- (b) There is also immense need for a continuous promotion of the donation Programme. The Gandhi Medical College / Hospital shall be made as the *Nodal Organization* for undertaking promotional activities by engaging a professional agency for the purpose. They may also conduct liaison with the various regulatory authorities like RTA, Passport Office, Chief Rationing Officer etc., to inculcate the habit or 'organ pledging' at the time of applying for or receiving driving license, passport, ration card etc. While such a pledge may not have any legal sanctity, it will still serve the purpose of sending the message to a large cross section of people that donation of organs is live-saving in nature and beneficial to the society.

## 17. Funding of Jeevandan Scheme:

(a) Implementation of Jeevandan Scheme has the following estimated financial implications:

(i) Establishment of AACT (at NIMS), Hyderabad .. Rs.45.00 lakhs

(CTC @ Rs 2 lakhs p.m; one Sr. medical professional

@ Rs.1,00,000 p.m.+3 Jr. personnel @Rs.25,000 p.m)

(ii) Infrastructure at NIMS, Hyderabad ... Rs.25.00 lakhs (iii) Promotion at Gandhi Hospital, Secunderabad ... Rs.25.00 lakhs (iv) Training at Osmania Hospital, Hyderabad ... Rs.5.00 lakhs

Total: .. Rs.100.00 lakhs

- (b) The estimated expenditure for the first year is likely to be of the order of Rs.1.00 crore. The AACT and APNOS shall make efforts to ensure that the Scheme becomes financially self-sufficient in the 2<sup>nd</sup> year through the registration fee as well as contributions from the NGOs and other philanthropic organizations which may be mobilized in due course of time. The seed money of Rs. 1.00 crore shall be mobilized within the overall budget allocated to DME and APVVP by way of reappropriation, following due procedure.
- 18. Accordingly all the Heads of Departments under the control of HM&FW Department the Director, NIMS, Hyderabad and all other Government departments, shall take necessary action, with which they are concerned.
- 19. This order issues with the concurrence of the Finance Department vide their U.O.No.7665/151/A1/EM&H.I/2010, dated: 09.06.2010.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

J. SATYANARAYANA, SPECIAL CHIEF SECRETARY TO GOVERNMENT

To

All the Heads of Departments under the control of HM&FW Department.

The Director General of Police, Hyderabad.

All the District Collectors in the State.

The Director, Nizam's Institute of Medical Sciences, Hyderabad. S.F. / S.Cs.

//forwarded :: by order//

SECTION OFFICER.