



Dr. D. Y. Patil Vidyapeeth, Pune (Deemed to be University)

Accredited (3rd Cycle) by NAAC with a CGPA of 3.64 on a four point scale at A++ Grade)
(An ISO 9001: 2015 Certified University)

BEST PRACTICE – 1

1. Title of the practice: Organ Donation and Transplant at Dr. D. Y. Patil Vidyapeeth, Pune

2. Objectives of the practice:

Dr. D.Y Patil Vidyapeeth (DPU), Medical College Hospital is a tertiary care hospital delivering super specialty services towards Organ Donation and Multi Organ Transplant providing care and treatment to patients with end stage organ disease. In Pune region currently, there are 1500 patients waiting for Kidney transplants, 1000 for Liver and 100 for Heart transplants. About 60% patients fall off the waitlist and die or progress to multi organ failure because of shortage of organs. DPU, Medical Hospital has played an important role in mitigating this need with following objectives:

- To create awareness amongst public for organ donation
- To follow the norms/ policies laid down by “The Transplantation of Human Organs Act and Rules” and guidelines laid down by the “National Organ and Tissue Transplant Organization (NOTTO) State Organ and Tissue Transplant Organization (SOTTO), Zonal Transplant Coordination Centre (ZTCC).
- To treat end organ failure patients through multi organ transplant department and experienced professionals with advanced surgical skills by identifying intensive care needs to monitor patients in transplant and post-transplant care.
- Identify barriers, hurdles, errors and formulate method of early identification and resolution of issues and improvement methods and assess and edit outcomes regularly.

3. The Context:

The urgent need for organ donation and transplant can never be overemphasized. Despite clear guidelines by the Central and State authorities and public awareness campaigns, there is misunderstanding, myths, fear, anxiety and hesitancy regarding organ donation resulting in few organ donations besides people dying for want of transplant. DPU has identified this issue and established a system to help organ donor families, respect their wishes for organ donation and provide a support system post donation with all due ethical, legal process in place.



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DPU has established Center for Multi Organ Transplant, Institutional Authorization Committee for Organ Donation and Transplant, Brain Death Committee, Team of Legal advisors, and experts in advanced multi organ transplant practices for cadaveric and related living organ transplant in adults and pediatric population as follows:

- Kidney and Cornea Transplant program since 2013
- Liver Transplant program since 2018
- Heart Transplant and Lung Transplant program since 2021
- Heart & Lung since 2022.

The Organ Transplant facility at DPU includes:

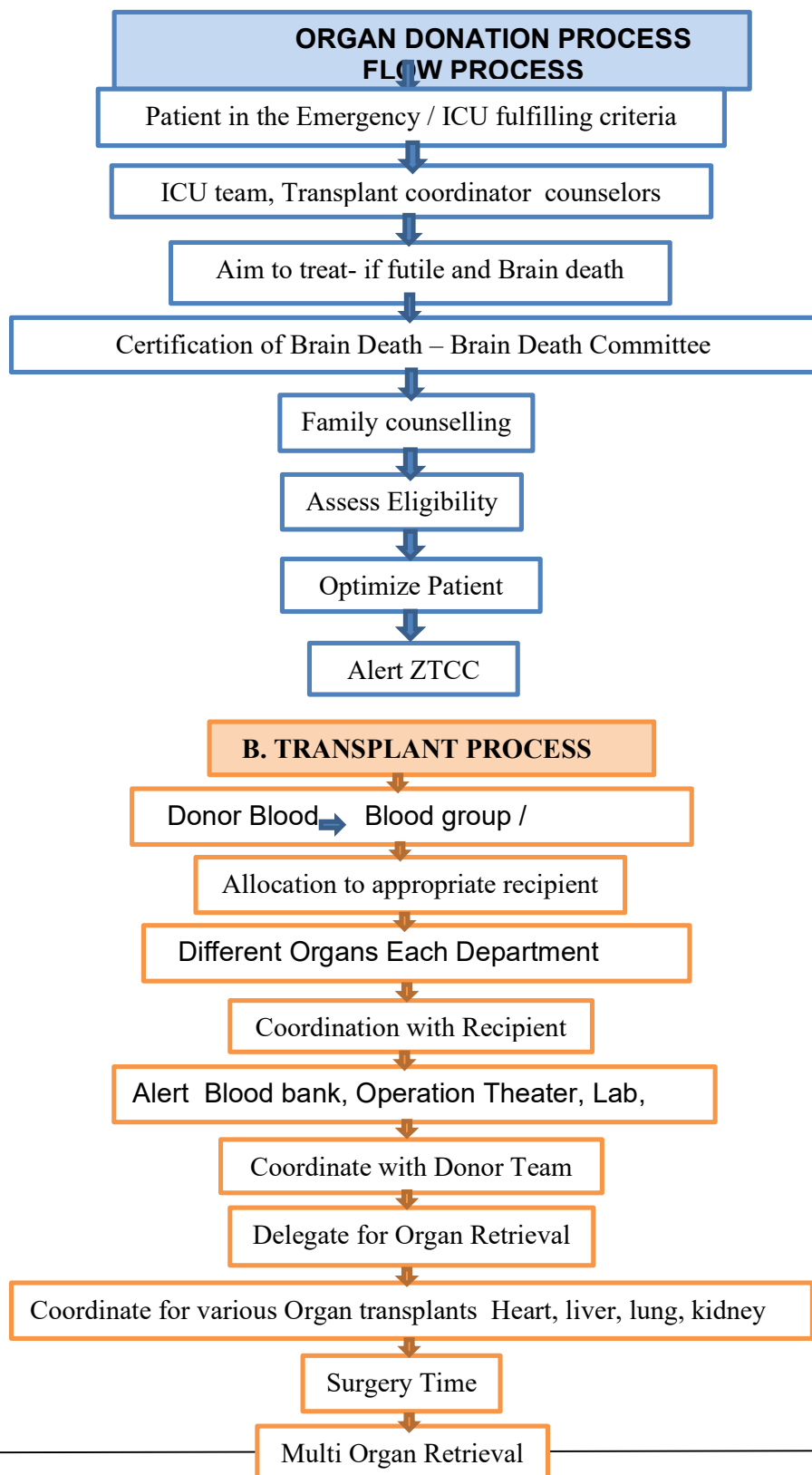
- State of the Art Operation Theaters for Living donor transplant
- 4th Generation Da Vinci Robotic Surgical System for Robotic procedures in the Living Donor
- Isolated and Highly specialized Transplant Intensive Care and Transplant Units
- Multidisciplinary teams are in place for transplant as per norms

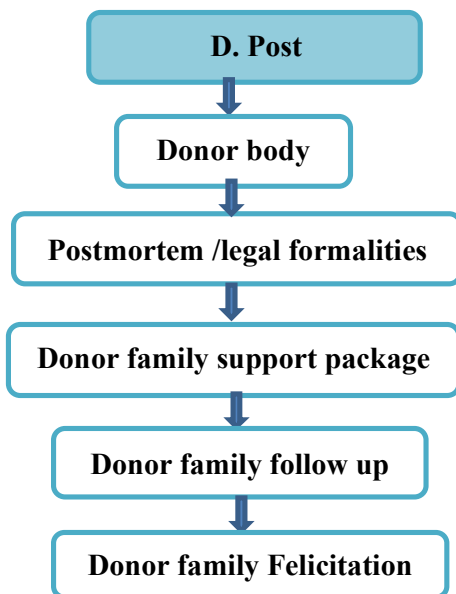
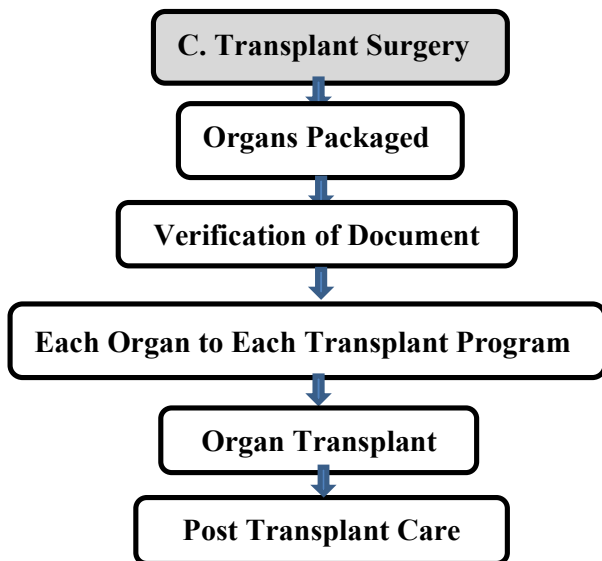
4. The Practice:

There is a well-established flow process from organ donation to transplant and post-transplant care.

A) Deceased Donation Process:

- Organ donation occurs after death however, when critical patient comes to the emergency department/intensive care unit, healthcare/transplant professionals are made aware and alert about the patient if donation is to take place.
- Guidelines and algorithm are followed in the case of clinical triggers for referral, if brain death occurs subsequently further process is adopted.
- At every level, trained experts, medical faculty and professionals are available to facilitate this exhaustive process which takes place in less than 24 hours.





B) Living Donation:

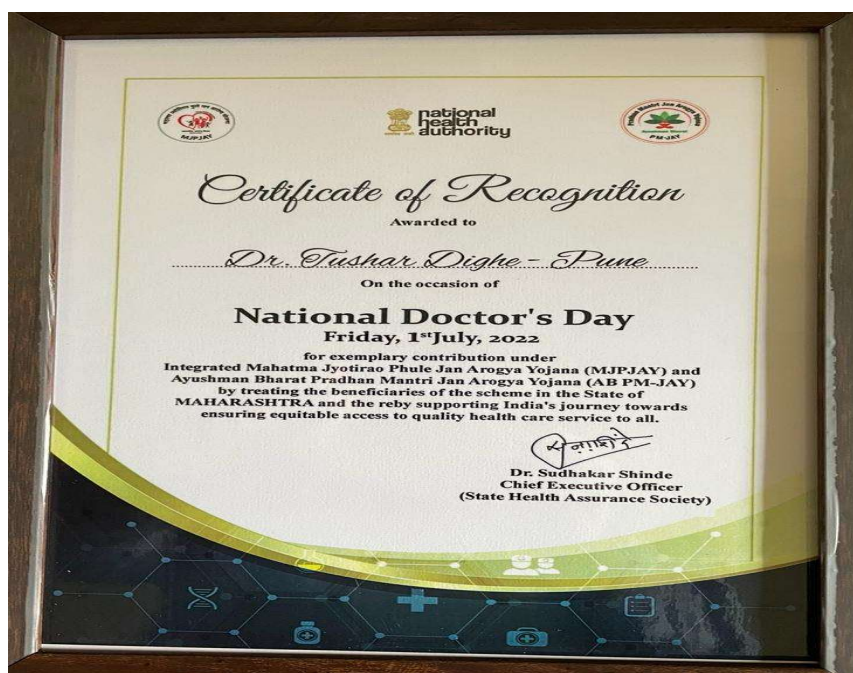
- Living donor patient and recipient families are counselled and evaluated in detail by multi-disciplinary teams and Ethical Committee before the proposal is sent for approval.
- Multi-level counselling support, opt out /alternative options are offered to both recipient and living donors separately and measures to protect the health and interest of the donor are taken.
- Living donor surgeries are elective hence are planned in great details, informed consents are taken and enough time is given to ensure the process is understood by both teams.
- To Promote Organ Donations Educational seminars for the public, medical fraternity are conducted at regular intervals

5. Evidence of Success:

The first Heart Lung Transplant in the region was done at Medical hospital. DPU offers affordable care packages for transplant patients and helps to raise funds and therefore access to life saving transplants. The complete horizon from poor to rich patients can access this super specialty services without any compromise or fear of want of care at DPU. DPU has performed a large number of Kidney Transplant under Mahatma Jyotirao Phule Jan Arogya Yojana (MJPJAY), Govt scheme as follows:

Total number of kidney transplants	138
MJPJAY	122
Other funding and self-paying	16

DPU has performed the largest number of deceased donations from a single center in Pune Region. In view of this achievement, Dr. Tushar Dighe (Nephrologist) was felicitated by Chief Secretary-National Health Authority-Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (2022) for performing maximum number of kidney transplants in MJPJAY in Private Hospital Category.



Total number of Transplants from August 2022 – July 2023

No. of Transplant												
Month	Kidney			Liver			K+L	Heart and Lung Transplant			K+P	Total
Types of Transplant	Living	Cadaver	Total	Living	Cadaver	Total	Cadaver	CH L	Heart	Lung	Cadaver	
August	2	2	4	Nil	2	2	Nil	1	Nil	Nil	Nil	7
September	1	Nil	1	1	1	2	Nil	Nil	Nil	Nil	Nil	3
October	Nil	2	2	Nil	2	2	Nil	1	Nil	Nil	Nil	5
November	1	Nil	1	1	Nil	1	Nil	Nil	Nil	Nil	Nil	2
December	2	Nil	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2
Jan	Nil	2	2	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	2



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Feb	Nil	Nil	Nil	Nil	1	1	Nil	Nil	1	1	1	4
March	5	1	6	Nil	2	2	Nil	Nil	Nil	Nil	Nil	8
April	1	0	1	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1
May	3	1	4	Nil	Nil	Nil	1	Nil	Nil	1	1	7
June	1	Nil	1	1	Nil	1	Nil	Nil	Nil	Nil	Nil	2
July	1	3	4	Nil	4	4	Nil	Nil	Nil	3	Nil	11
Total	17	11	28	3	12	15	1	2	1	5	2	54

The organs received are not only utilized at DPU hospital but have also been sent to other hospitals through provision of 'Green Corridor' provided by Govt of Maharashtra as per allocation guidelines.

Total Brain Stem Death (BSD) declaration for the period – August 2022 – July 2023

Sr. No.	Brain Stem Death (BSD)	Numbers
1	Total Brain Stem Death (BSD) declaration from 2018 to till date	29
2	Total BSD converted to Organ Donation	19
3	Total Organ Donation Declined due to medical reason or any other reason	10
4	Total Organs Utilised from organ donation till date (Inhouse + Shared to Others)	66
6	Inhouse Organ Utilization	66
7	Organ Shared with various hospitals through ZTCC, Pune	29
8	Organ Received from various hospitals through ZTCC, Pune	1
9	Total Organ Utilization	67



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Utilization of Donated Organs:

The success rate of the various transplant surgeries as depicted above results in DPU medical hospital being a high priority destination for health care. Every year DPU conducts several awareness workshops related to the importance of organ donation through several NSS activities. Some of the activities related to voluntary body and Organ donation are as follows:

- Body donation pledge forms filled - 1907
- Organ donation pledged – 259
- Bodies donated after awareness campaign - 51
- Corneal donations - 106
- PhD completed - 1

Conducting these awareness camps has resulted in increased awareness regarding possibility of donation of several organs.

Activities to Promote Organ Donations:

1. Educational seminars for the public, medical fraternity are conducted at regular intervals . Experts travel to remote centers, and various campaign measures are taken to create awareness and remove myths and misunderstandings about organ donations.
2. Interactive sessions between different groups nationally and internationally to constantly update current professionals in organ donation process and its advanced scientific measures and guidelines.
3. Research (20 Publications, 3 Awards)
4. Collaboration with various Government organizations for organ donation activities like NOTTO, SOTTO, ROTTO and ZTCC on a regular basis.
5. Visiting remote and urban hospitals to educate them about brain death certification process, organ donation and providing professional support in times of need of organ donation.

The First Heart Transplant at DPU was done for a patient with a weak economic background and his surgery was completely free of cost and the expenses were borne by DPU management. On this principle



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a lot of patients with low finances who cannot afford transplants and yet do not fulfil the requirements of the Govt scheme have been benefited and no patient is turned away for want of funds.

Research:

- Bharambe V. Organ shortage: Can educating the medical students be the key? *Medical journal of Dr D Y Patil Vidyapeeth*.2021;14940:468-468
- Bharambe V, Puranam V, Manivikar P. Organ donation and gender differences. A qualitative study of female donor experiences. *Teikyo Medical Journal*.2021;4495):1123-1131
- A descriptive cross sectional study to access knowledge regarding brain death among health professionals in India. Accepted for publication in *Indian journal of transplantation*
- Organ donation from medical care professional's perspective: A study in Pune region of India. Accepted for publication in *Saudi Journal of Kidney disease and transplantation*.
- "Challenges and impact of organ donation and ways to combat them- A study in Pune revenue division of Maharashtra". *PhD degree awarded in 2018* to Dr. Vaishaly Bharambhe. Professor of Anatomy DPU. Medical College.
- "Case of Combined HLT in scleroderma related progressive ILD" presented at the National conference *ACINUS 2022 and received first prize* by Dr. Sakhavalkar and team CCU DPU
- "Gift of Life CHLT for ILD and severe PAH in a patient with systemic sclerosis" *ACINUS 2022 Dr. Sakhavalkar and team CCU DPU*
- "Cost effective combined Heart Lung Transplant Care with humanization in tertiary care ICU of Medical College" – Dr. Prashant Sakhavalkar, Dr. Kalpana Kelkar, Dr. Prachee Sathe, Dr. Asir Tamboli, Ms. Mayuri Barge – sent for publication to *The Indian Journal of Critical Care*.
- Vrishali P Patil, Hans Sollinger; Pancreas Transplantation: Improving Survival In Diabetes, Oxford University Press. United Kingdom Gastrointestinal Surgery Library: Pancreas. Book Published 29 September 2022, Chapter 14.



The Transplantation Society (TTS)
congratulates

Abhijit Chavan

for participating as a

2022 TTS Student Ambassador

29th International Congress of The Transplantation Society

September 10th – 14th, 2022


Marcelo Cantarovich
President
The Transplantation Society



Academic Activities Undertaken to Promote Organ Donation

Organ Donation Awareness & Training Activities

Kutuh Medical Expo for Organ
Donation Activity



Participated as Speaker in ROTTO SOTTO
Transplant Coordinator's Training Programme



Participated as Speaker in ROTTO SOTTO
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Participated as Panelist in National Med legal Awareness
Campaign on Organ Donation, Pune



Awareness Activity with IMA (Pune & Pimpri Chinchwad)





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Participation in film prepared by ROTTO /SOTTO for Coordinator Training



Awards & Accolades...



By ZTCC, Pune



By IMA Pune



By IMAPCMC



By S.B. Patil College, PCMC



By ROTTO SOTTO



By Lions Club Internationals District 3234 D2





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A program was organized on National Organ Donor Day for the families of cadaveric organ donors in which we felicitated the members of these families for their contributions to the cause.





Dr. D. Y. Patil Hospital and Research Center, Pune, has received recognition in the following categories within the Maharashtra State and the broader region, encompassing Maharashtra, Gujarat, Madhya Pradesh, Goa, Chhattisgarh, Daman and Diu, as well as the Union Territory of Dadra and Nagar Haveli in 2022:

- 1) Best Transplant Coordinator in Maharashtra Region and State
- 2) Best BSD team in Maharashtra Region and State

3) Exemplary performance in transplant surgeries or Treatment of End Stage Disease



Salute to the Real Heroes





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6. Problems Encountered And Recourses Required:

- Large number of patients on waitlist and the number of organ donations being less. Measure to bridge this gap is an ongoing process.
- Transplant surgery and immunosuppression with frequent investigations and hospitalization make it an expensive treatment. Therefore patients avoid transplants due to lack of funds.
- At DPU for organ transplant resources required includes providing super specialty facilities , using standard practices like isolation rooms, trained nursing staff with one to one patient ratio and separate paramedical staff besides individualized care plans that are affordable and if not affordable are discussed case by case for possibility of government funding.
- The overall issues and challenges faced in Transplant include very few pediatric and female organ transplants. Therefore DPU takes initiatives in counseling, raising awareness and making it easy for follow up as per family circumstances.
- The biggest challenge is also to prevent Organ Trafficking that is addressed by increasing awareness for deceased donations and having meetings with legal advisors and patients and families, providing brochures and information to patients to ensure legal framework is followed.

7. Note:

DPU continues to develop Global standards of practice of Excellence of Health Care in a medical college set up in a suburban area of Pune. It provides multi organ transplant facilities under one roof with affordable and accessible care. At the same time, Medical and nursing students get trained and gain experience in advanced care techniques in organ donation and transplant. The goal for future is to have Hand Transplants, Uterus Transplant, Small Bowel transplant, Islet cell transplant and Research lab. We are in collaboration with International programs to develop program with ongoing academic teaching and scientific exchange of ideas and protocols.

This is to certify that the above document has been verified.

(Dr. Narendra M. Kadu)
Registrar (Offg.)