ISSN 0972 - 1568

INDIAN TRANSPLANT NEWSLETTER

A quarterly publication from
MOHAN FOUNDATION
MULTI ORGAN HARVESTING AID NETWORK

Vol.21 Issue No.: 66

July 2022 – October 2022

The Editor, ITN Desk
MOHAN FOUNDATION
Toshniwal Building, 3rd Floor
267, Kilpauk Garden Road, Kilpauk
Chennai 600010.
Tel : +91-44-26447000
Email: info@mohanfoundation.org
Website: www.mohanfoundation.org
Toll Free Helpline - 1800 103 7100

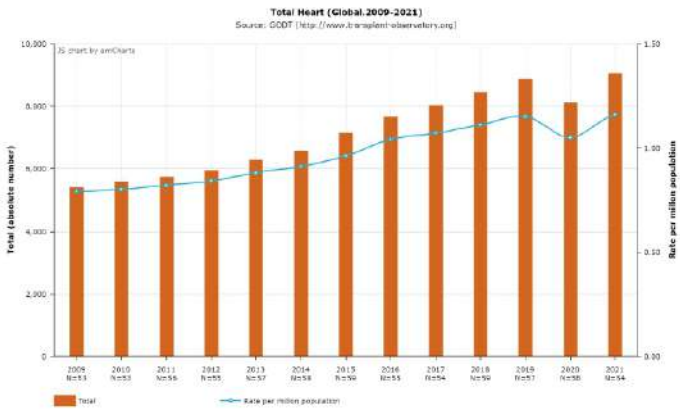
www.itnnews.co.in

Editorial Desk

Progress with Heart and Lung Transplantation in India

India's thoracic organ transplant program has evolved in the past ten years and currently is the number one program in South Asian region. The global average of heart transplants stands at about 1.06pmp (2016 - 2018). Annually about 8,000 to 9,000 heart transplants are performed worldwide with almost 50% being performed by USA. South and Southeast Asia do less than 5% of the global heart transplants and India does over 90% of these surgeries.*

Similar is the story with lung transplantation. Over 7000 lung transplants are done globally of which over 40% are done by USA alone and India does most of the ones that are done in south and Southeast Asia.



Heart transplants - Global data

India's progress with heart and lung transplants in the last decade reflects the growth of deceased donation program in the country. At present there are very few cardiac units in the country that have seriously invested their time and resources to this program.

The growth and the momentum has been possible due to local champions who have worked tirelessly. Though the growth has been largely confined to private sector hospitals, but despite all the logistical and financial challenges, progress has been truly remarkable.

This newsletter is dedicated to thoracic organ transplants and we bring international data along with two articles on the subject. The first article is by Dr.K.R.Balakrishnan, who has performed the maximum number of heart transplants in India (more than 50% of all heart transplants) and the second is from Dr. Dhiren Shah from Ahmedabad. Gujarat has recently shown an upsurge in deceased donation numbers and is likely to excel in the future with some world class hospitals coming up in the state.

*Global Observatory on Donation and Transplantation - http://www.transplant-observatory.org/

IN THIS ISSUE

In the news - International

First Intestine Transplant from an Asystole Donor Carried Out in Spain and in the World

The world's first multi-visceral transplant from a controlled asystole paediatric donation was performed at La Paz University Hospital in Madrid in 2022. The transplant was performed on a 13-month-old Emma, who had been diagnosed with intestinal failure when she was just one month old as her intestine was too short. Apart from the intestine, Emma also received a new liver, stomach, spleen and pancreas.

Though donation after circulatory death (DCD) is becoming more common in many parts of the world, what makes the intestine transplant exception is the difficulty in preserving an intestine from asystole donation due to the digestive organ's characteristics. This indicates that compared to other organs, the risk of rejection and the possibility of infection is higher in intestine transplant.

"It is important to emphasise, as director of the ONT (National Transplant Organisation), what this transplant represents, what it represents for Emma, but also what this transplant will represent for many children in Spain and in other countries around the world because we are really talking about a milestone, it is the first intestinal transplant from an asystole donor to be carried out in Spain and in the world," said Beatriz Dominguez Gil.

Spain tops the list with highest deceased organ donation rate in the world. According to the Global Observatory on Donation and Transplantation, Spain contributed to nearly 5% of global organ donations in 2021, with DCD accounting for one-third of all donations.

Organ Donation After Death: Mixed Messages from Canada

A poll conducted recently in October 2022, among 1000 Canadian nationals found that while a majority of Canadians have expressed wish to donate their organs and tissues after death, only a fewer have formally registered their wish.

"Two-thirds (68%) of Canadians nationwide want to donate organs or tissues after their death, but 21% disagree and 11% are undecided," according to the poll done by Research Co. However, only 43% have actually registered to have given their "Explicit Consent" to be an organ and tissue donor after death, which is stated on the health card or driver's licence. "On the issue of organ and tissue donation after death, the thoughts and actions of Canadians differ greatly," says Mario Canseco, President of Research Co.

The survey also discusses the age group of the people who have pledged as organ and tissue donors. It indicates that Canadians aged 55 and older are the most supportive of the practise (92%) followed by those 35 to 54 (84%) and those 18 to 34 (78%).

A Team from Tokyo Medical and Dental University Performed the World's First Organoid Transplantation

In July 2022, a team at Tokyo Medical and Dental University (TMDU) announced the world's first clinical 'mini-organ' transplantation into a patient with ulcerative colitis which was in an untreatable condition. It is the world's first organoid transplantation for refractory ulcerative colitis, which is difficult to treat with steroids, and the first organoid transplant performed in a human. The mini organ, which is a part of a clinical trial, is made from patient cells and performs similar tasks to the large intestine.

A healthy colonic mucosa from the patient's vicinity was used to culture into spherical organoids and the same was transplanted into the same patient's colon by colonoscopy. The patient made a good progress and was discharged from the hospital the next day. This clinical study used the patient's own cells, which had the advantage of avoiding transplant rejection. In addition, since colonoscopy was used for collection and transplantation, minimally invasive treatment was possible without the need for laparotomy.

Dr. Mamoru Watanabe, Vice president and distinguished professor at TMDU stated, "If our first-in-human research using organoids transplantation yields good results, we expect that the development of organoid medicine for intractable diseases of the digestive tract such as Crohn's disease will progress."

Dr. Ryuichi Okamoto, a professor of the Department of Gastroenterology and Hepatology, Graduate School of Medical and Dental Sciences said, "We embarked on the path of developing new methods for treating intractable diseases. This treatment should establish the efficacy and safety as soon as possible and deliver to the patients."

FORM – IV

Place of Publication: Chennai
Periodicity of its Publication: Quarterly
Printer's Name: Sugan Printerz
Nationality: Indian
Address: Chennai
Publisher's Name: Sunil Shroff
Nationality: Indian
Address: MOHAN Foundation, Toshniwal Building, 3rd Floor, 267 Kilpauk Garden Road, Chennai 600010
Editor's Name: Sunil Shroff
Nationality: Indian
Address: MOHAN Foundation, 267 Kilpauk Garden Road, Chennai 600010

I, Sunil Shroff, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Sd/-
Sunil Shroff
Date:31st October 2022

Signature of Publisher

In a "Marathon Surgery" Doctors in Kerala Perform India's First Shoulder-Level Full-Arm Transplant

Doctors at Amrita Hospital, Kochi performed nation's first shoulder-level full-arm transplant and third in the world after Mexico and France.

Amaresh, an employee of Karnataka's Gulbarga Electricity Supply Company, lost his hands in electrocution at work in 2017. His left hand was amputated at shoulder level while right hand at the elbow level. In September 2018, he was enrolled as a recipient awaiting transplantation in the Kerala Network for Organ Sharing (KNOS) with the help of Amrita Hospital.

Amaresh's long wait came to an end in January 2022 when Vinod's family agreed for donation of his hand along with other organs. Vinod (age 54, native of Kollam, Kerala) was declared brain dead at Government Medical College in Thiruvananthapuram after he sustained severe head injury in a deadly road accident.

On getting consent from Vinod's family, and hands retrieval, a team of doctors led by Drs. Subramania Iyer and Mohit Sharma from the Centre for Plastic and Reconstructive Surgery at Amrita Hospital performed the challenging 18-hour shoulder level transplant surgery on Amaresh which required a team of 20 surgeons, 10 anaesthetists, and 5 practice sessions.

Dr. Iyer explained that hand transplants become challenging when the level of amputation is higher, hence shoulder-level full-arm transplants are difficult. To start with, the retrieval of hands at shoulder level itself is a complex procedure involving muscles of chest, neck and upper limbs; major arteries, veins and nerves and with no training available, team had to self-train and perform practice sessions on cadavers.

After a successful hand transplant, Amaresh is now on the road to recovery with regular physiotherapy sessions.

Safdarjung Hospital Sets a Milestone, Performs First Robotic Kidney Transplant in Government Hospital

A 39-year-old from Farrukhabad, Uttar Pradesh who had been suffering from kidney ailment for almost seven years got a new lease of life at Safdarjung Hospital. His wife donated one of her kidneys and he had undergone a robotic kidney transplant, free of cost. This also happened to be 100th kidney transplant and the first robotic kidney transplant performed at the Sadarjung Hospital, Delhi.

The procedure was performed on 21st September, 2022, after the COVID-19 wave had passed. Dr. Anup Kumar, Head of the Urology, Robotics, and Renal Transplant Department of the central government-run facility told that the patient works in a private company in Uttar Pradesh and had come to Safdarjung Hospital for his transplant. The cost of the robotic transplant procedure in the private sector can go up to Rs. 6-7 lakh and this patient couldn't afford the same.

Dr. Kumar added that the surgery itself was technically challenging as the patient was obese with the BMI of 32. In addition, this surgery also requires expertise, both in robotics and transplant surgery. While talking about the transplant, he said "Robotic surgery is a minimally invasive surgery and there are only a fewer chances of post-surgery hernia and infection (unlike a regular transplant, where an open surgery is performed through a larger muscle-cutting process). It is more accurate, and leaves patients with fewer scars post-surgery."

Dr. Kumar called the transplant surgery a milestone in the history of Safdarjung Hospital. "It requires great expertise, but not all patients are suitable for minimally invasive surgery and we select patients on a case-by-case basis", he added.

Chennai-Based Hospital Introduces the Prototype of Drone for Organ Transportation

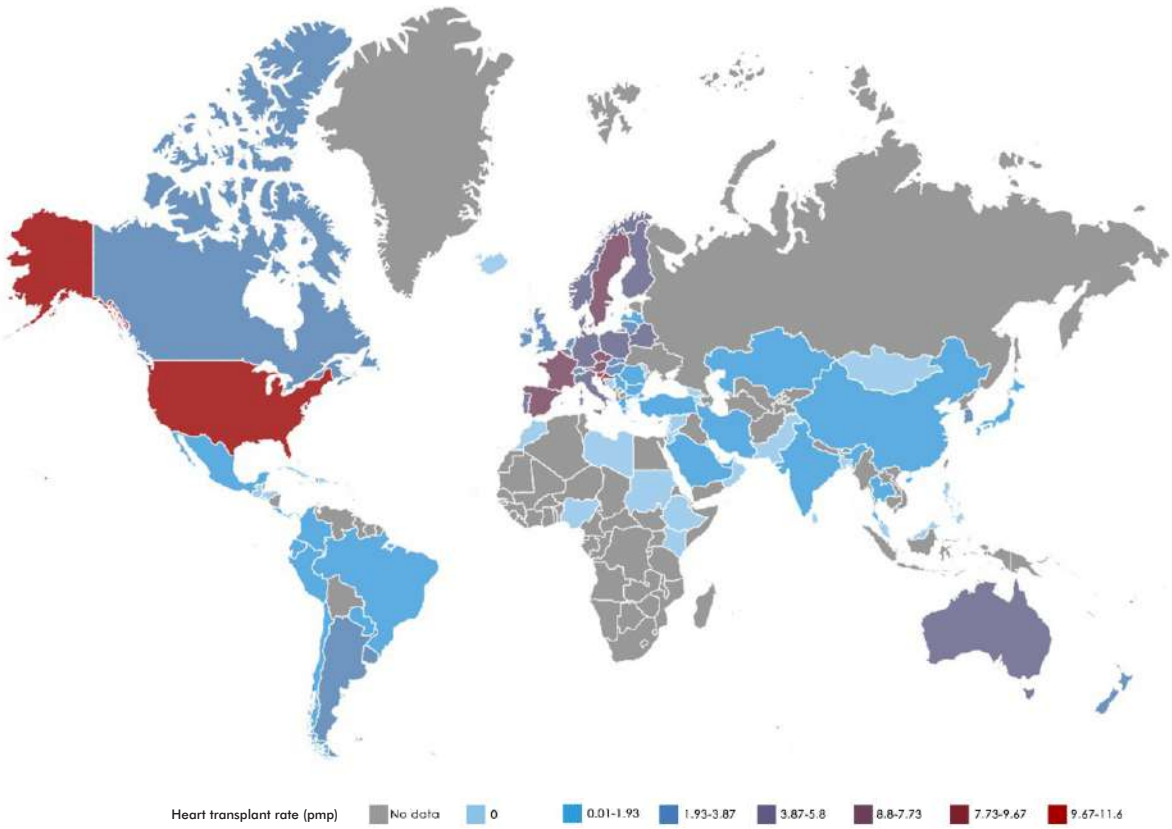
In Chennai, waiting for ambulances carrying life-saving organs and green corridors may soon become a thing of past. Organ logistics or safe and timely transport of organs is an important aspect of successful organ transplant. Given the shortage of donor organs, delay in transportation results in wastage of organs. In September, 2022, at an event conducted by the MGM Healthcare, Chennai, Union Minister, Nitin Gadkari and Tamil Nadu Health Minister, M. Subramanian, unveiled the prototype of drone to be used for organ transportation.

MGM Healthcare, Chennai has co-developed the drone with a city based drone company. The objective, according to Dr. Prashanth Rajagopalan, Director, MGM Healthcare, is to transport organs throughout the city without the need for many human interactions and disruptions to the flow of traffic. Once the permission is granted, the hospital would use drones to fly organs from nearby districts and states.

Getting organs to the recipient on time is one of the challenges frequently faced, especially if the organs come from tier-2 and tier-3 cities as many such towns and cities lack airports. "It is best to get the harvested heart transplanted within four hours. It's a fight to do this every time. We have made a start with the drone." said Dr. K. R. Balakrishnan who heads the Institute of Heart and Lung Transplant and Mechanical Circulatory Support at MGM Healthcare, Chennai.

Heart & Lung Transplants Around the World

Total heart transplants from different regions of the world - 2021



Heart transplants

Country	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
USA	2349	2407	2554	2679	2819	3209	3273	3440	3597	3716	3863
France	410	417	421	436	479	368	473	459	434	378	415
Germany	366	346	313	304	286	490	257	318	344	339	329
Italy	278	231	219	227	245	119	265	233	245	238	252
Spain	237	247	249	265	299	281	304	321	300	278	302
Brazil	160	227	268	309	352	125	380	358	383	308	334
Canada	157	172	208	157	172	357	215	193	215	188	142
United Kingdom	148	142	195	186	194	209	191	194	188	179	169
China	147	147	147	147	279	204	446	490	679	557	738
Russia	107	132	164	162	179	220	252	285	337	251	-
Argentina	106	111	100	101	114	115	117	132	124	94	114
Iran	82	77	91	82	102	297	144	131	126	67	141
Poland	80	79	87	76	99	266	98	147	145	145	200
Republic of Korea	71	107	127	118	145	101	184	176	194	173	168
Australia	66	76	79	83	95	125	98	128	113	148	112
India	**15**	**15**	**30**	**53**	**118**	**216**	**237**	**241**	**187**	**89**	**151**

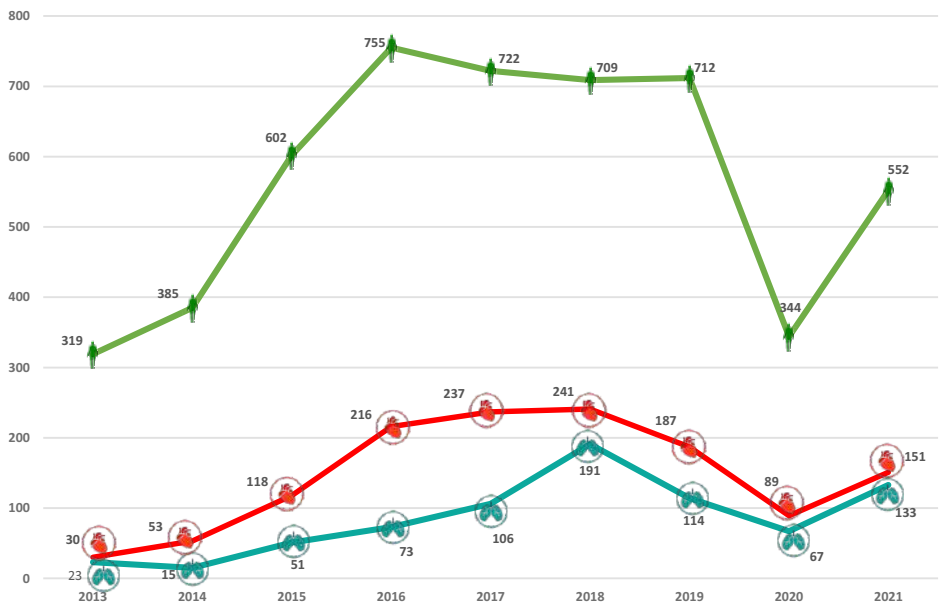
Lung transplants

Country	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
USA	1850	1783	1946	1949	2072	2345	2478	2562	2759	2597	2569
Germany	337	361	371	352	297	328	309	375	361	344	283
France	324	342	310	340	353	384	384	382	393	291	322
Spain	230	238	285	262	294	307	363	369	419	336	362
United Kingdom	191	182	211	194	202	168	198	189	167	99	105
Canada	181	194	314	220	279	302	348	361	403	325	352
Australia	159	148	169	166	195	199	210	222	183	158	171
Austria	120	124	128	134	130	110	116	117	100	100	123
Italy	120	114	141	126	112	147	144	144	153	115	117
Belgium	111	129	101	103	129	129	121	116	113	93	94
Netherlands	68	80	88	91	78	73	74	89	105	87	92
Japan	51	44	61	61	61	67	66	71	92	75	93
Brazil	48	81	134	67	74	92	112	121	106	65	84
China	33	33	33	33	118	204	299	403	489	513	775
Republic of Korea	16	37	46	55	64		93	92	157	150	167
India	**-**	**-**	**23**	**15**	**51**	**73**	**106**	**191**	**114**	**67**	**133**

Living donor lung transplant

Country	2011 - 2021
Japan	170
Brazil	12
Russia	11
Germany	6
USA	3
Austria	1
Canada	1

Deceased organ donors and Heart & Lung transplants in India



Source: http://www.transplant-observatory.org/ (as on 26th October 2022)

Heart and Lung Transplantation in India - Current Status

K R Balakrishnan
Director
Institute of Heart and Lung Transplant and Mechanical Circulatory Support
MGM Healthcare, Chennai

Heart transplantation in India was first performed by P. K. Sen and colleagues way back in 1968 just a year after Christian Bernard performed the world first.[1] This was backed by prior solid experimental work on about hundred canine heart transplant experiments. This is in deed a feat which is not only remarkable but unimaginable today.[2] The patient survived only a few hours.

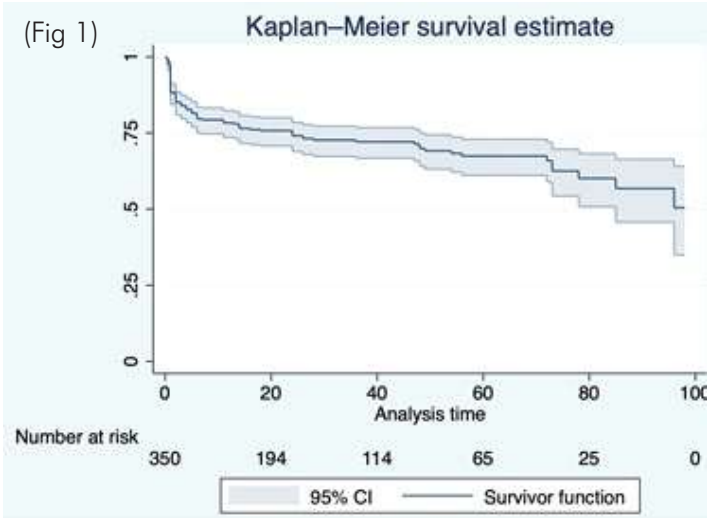
And after this, the wait for the first successful heart transplant was 25 years until Dr. Venugopal performed it at All India Institute of Medical sciences in August 1994.[3] The progress for the next 15 years was slow and until the year 2012 only a total of about 30 transplants had been performed in the country.

The birth of the modern heart transplant program in India happened in Chennai. The state of Tamil Nadu was the first to streamline the process of organ donation and distribution in an organized manner.[4] The previous experience of non-governmental organizations like MOHAN Foundation and NNOS to propel the government helped the state government to take the onus of the deceased donation program.[5]

This led to a steady increase in the number of donors and hearts transplanted in the state. Over the next few years, with increasing awareness, organ donation activities spread across the country. Annually close to 750 organ donations happen in India, with over 200 heart transplants. Lung transplant started in 2012 in Chennai and is now done in 3 centres in this country in significant numbers.

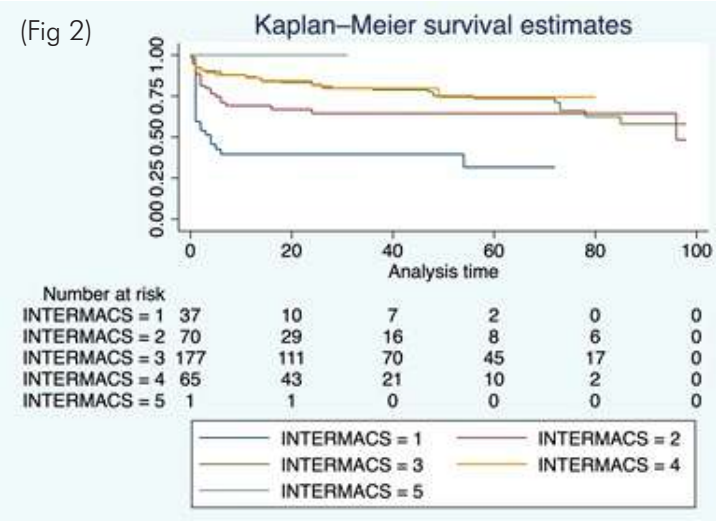
Despite the challenges of diversity and inequity in a large country, the program has matured and is growing steadily. And despite the logistic difficulties of followup including immunological monitoring, the outcomes have been comparable to programs from developed countries.[6] Our own centre results of over 500 heart transplants compare favourably with internationally published results with over 50% alive at 10 years (Fig 1). The survival is significantly better for younger recipients and patients in better functional class at the time of surgery (Fig 2).

(Fig 1)



10 year survival - 63% if age is less than 40 years at the time of transplant

(Fig 2)



INTERMACS captures functional class INTERMACS 1 is cardiogenic shock. Higher categories signify better functional status

Challanges:

1.Logistics of organ transport:

The heart as an organ is very sensitive to ischemic injury and needs to be re-perfused in the recipient within 4 to 5 hours after harvesting from the donor. This is very different from the kidney and liver where longer ischemic times are possible. Hence the logistics of transporting organs across long distances becomes a challenge in a vast country like India especially as there is no support from the insurance or the government in terms of funding for this. Very often commercial airlines are used for organ transport at exorbitant costs.[7] Several state governments cover the cost of transplants to varying extends.[8]

2.Quality of life after transplantation:

No formal exercise testing with VO_2 max has been done for all the survivors. The quality of life is excellent with normal exercise capacity. A few patients have competed in transplant Olympic games and have won marathons in an open field.

3.Rejection:

Rejection is an important and potentially preventable cause of mortality both early and late. Cell mediated rejection is easier to diagnose and treat than antibody mediated rejection. Donor specific antibody testing is not available easily across the country, is expensive and often the result is available only a few days later.

Immunohistochemistry of biopsy specimens need expertise and is not always found. Our protocol of limiting endomyocardial biopsies is based on our infrastructural realities and is not a virtue in the absence of blood based immune monitoring strategies like donor derived cell free DNA estimations and Immune Cell

Function Assay (Cylex, Inc., Columbia, MD, USA) developed to measure the activity of CD4+ T cells as a marker of global immune-competence and allogene map testing. None of these tests are currently commercially widely available in India. The results presented here may be encouraging but clearly there is a great scope for improvement.

Hurdles to overcome

1.Organ utilisation

Despite these encouraging results, the utilisation of organs, especially heart remains suboptimal and a significant number of healthy hearts and lungs remain unused.[9] Logistics of organ transport, cost, lack of trained manpower and absence of adequate infrastructure in public hospitals may be the contributing factors.

2.Late referrals

Many patients are referred after multiple admissions and procedures and after exhausting financial resources. Mechanical circulatory support, even though a well-established therapeutic modality in India, is very expensive and not covered by insurance.

3.Paediatric organ donations:

They are very few and no donation is currently happening in public children's hospitals and often hearts from older donors are used in children. Older donor age is associated with poorer long-term survival, a highly unsatisfactory situation.[10]

4.Lack of heart failure clinics

Heart failure cardiology as a subspecialty needs to be promoted to compete with more lucrative interventional cardiology streams.[11] More awareness needs to be created for increasing organ donation rates and for earlier referrals for optimal outcomes. The involvement of cardiologists in this program is still suboptimal and a large number of patients who might have benefitted from the available organs are denied this life saving therapy.

Conclusion:

Heart and lung transplantations are now well established procedures with long term results comparable to published international results. The learnings from India will help many countries to fast forward their program in the region. Despite the multiple challenges India's thoracic organs transplant program has over the years matured and is an example for other developing countries to follow.

References:

1.David S Jones, Kavita Sivaramakrishnan, Transplant Buccaneers: P.K. Sen and India's First Heart Transplant, February 1968, Journal of the History of Medicine and Allied Sciences, Volume 73, Issue 3, July 2018, Pages 303–332.

2.Sen PK, Parulkar GB, Panday SR, Kinare SG. Homologous canine heart transplantation: a preliminary report of 100 experiments. Indian J Med Res. 1965 Jul;53(7):674-84.

3.Venugopal P. The first successful heart transplant in India. Natl Med J India. 1994 Sep-Oct;7(5):213-5.

4.Annadurai K, Mani G, Danasekaran R. Road map to organ donation in Tamil Nadu: An excellent model for India. Int J Prev Med 2015;6:21.

5.Kanvinde, Hemal; Shroff, Sunil; Kumar, Pallavi; Jairam, Jaya. Experiences and Challenges in an NGO run Organ Donation Helpline. Transplantation: July 2018 - Volume 102 - Issue - p S197 doi: 10.1097/01.tp.0000542846.76127.c2

6.Balakrishnan KR, Sureshrao KG, Ravikumar R, Muralikrishna T, Ganapathy Subramaniam K, Mohan R, Ajay A, Ramasubramanian K, Jagdish D, Veena R. Medium term results following heart transplantation for end stage heart failure: A single center experience of 257 patients. Indian Heart J. 2020 Nov-Dec;72(6):524-534. doi: 10.1016/j.ihj.2020.09.010.

7.K. Bala Krishnan, K. Suresh Rao, M.K. Tanguturu, M. Rajam, A. Aravind, J. Dushyanthan, R. Subramanian, V. Ramanan, Commercial Airlines as a Viable, Safe and Cost Effective Way for Transporting the Donor Hearts across the Country: Single Center Experience, The Journal of Heart and Lung Transplantation, Volume 38, Issue 4, Supplement, 2019, Pages S133-S134, ISSN 1053-2498

8.https://timesofindia.indiatimes.com/city/chennai/heart-transplant-performed-for-first-time-in-coimbatore-under-chief-ministers-comprehensive-health-insurance-scheme/articleshow/67469077.cms

9.https://jeevandan.gov.in/organstatistics.htm

10.Balakrishnan KR, Rao KGS, Subramaniam GK, Tanguturu MK, Arvind A, Ramanan V, Dhushyanthan J, Ramasubramanian K, Kumaran KS, Sellamuthu G, Rajam M, Mettur S, Gnansekharan P, Ratnagiri R. Clinical profiles and risk factors for early and medium-term mortality following heart transplantation in a pediatric population: A single-center experience. Ann Pediatr Cardiol. 2021 Jan-Mar;14(1):42-52.

11.Balakrishnan K. Heart transplantation in India-are we there yet? Indian J Thorac Cardiovasc Surg. 2020 Aug;36(Suppl 2):159-165.

Heart Transplantation and Deceased Organ donation - The Story from Gujarat

Dr Dhiren S Shah
Director and Consultant
Cardio Thoracic & Vascular Surgery
Director - Heart & Lung Transplant Program
Director - Mechanical Circulatory Support Program
Care Institute of Medical Science (CIMS)
Ahmedabad, Gujarat

Heart transplantation is an established form of treatment for advanced heart failure in the modern world since the last 40 to 50 years. Over the past ten years, the number of heart transplants performed worldwide has increased by more than 300%, and in the US, it has increased by more than 400%. In western countries, especially in North America the number of heart transplants took off in a steep way after 1980s reaching to almost 3000 to 4000 heart transplants annually. It has reached plateau because of the number of organ donations that could be achieved.

In India, the first successful heart transplantation was performed at the All India Institute of Medical Sciences, Delhi in 1994. However, the number of heart transplants did not pick up until 2010. In fact, only in 2019 India reached its milestone of performing 1000 heart transplants, almost 25 years after the Transplantation of Human Organs Act passed by the Government of India. It is quite evident that the deceased organ donation is very less in numbers in India compared to the number of organs required for transplants. Only after 2010, the organ donation rate gradually picked up particularly in southern India and simultaneously heart transplantation started taking its stride in southern states. However, in western India, there was no trace of heart transplantation happening though the number of organ donation was steadily increasing in some parts specifically in cities like Surat, Bhavnagar and Rajkot in Gujarat.

Support from reputed institutions like Institute of Kidney Diseases and Research Centre (IKDRC) and non-governmental organizations (NGOs) spearheading awareness helped reaching this height. It so happened that Surat became the city with maximum number of organ donations in the country in recent years, but surprisingly there was no heart transplant centre in the city. The number of heart transplantation could be an ideal indicator of deceased organ donation status of any particular state or country. The statistics seen initially in Tamil Nadu, Kerala, and Andhra Pradesh in the early 2010 and later in Gujarat and Maharashtra clearly demonstrates that heart transplantation can act as a catalyst to increase deceased organ donation in the country.

In 2016, the CIMS Hospital in Ahmedabad, received its heart transplantation licence and the first heart transplantation of Gujarat was performed on 19th December 2016. With the heart transplant, which is undoubtedly the most celebrated and glorified transplant procedure, the awareness about organ donation has rapidly increased reaching to every corner of the state.

Between 2017 and 2019, there was almost 20% increase in the deceased organ donations in Gujarat. CIMS Hospital was still the only hospital performing heart transplants in Gujarat and the numbers were steadily growing following the J curve. When the COVID-19 struck in 2020, yet the spirit of organ donation was high. Even in the midst of lock down, Gujarat did India's first deceased organ donation during the pandemic where heart, liver and kidneys were retrieved. Deceased donation has doubled in Gujarat compared to 36 donations in 2020 to 70 donations in 2021 and number of organs donated increased from 110 to 223 organs in 2020 and 2021 respectively.

Civil Hospital in Ahmedabad which is one of the largest hospitals in Asia, hardly had any organ donations till 2020. Despite the fact that 80 to 90 patients are on ventilators in the neurosurgical ICU at any given moment, a large number of brain-dead potential organ donors are left unidentified. In 2020-21, the organ donation drive was initiated by the state government with the support from non-governmental organizations in the Civil Hospital as a result of which the deceased donation rate of the hospital increased significantly. The Civil Hospital, Ahmedabad marked its 100 deceased organ donations within a period of two years with 77 livers, 152 kidneys, 23 hearts and 18 lungs donated.

Despite the horrifying second wave of COVID-19, CIMS Hospital, Ahmedabad performed 14 heart transplants in 2021, nine of which were done in the last two months of the year. In fact, three heart transplants were performed in a span of six days in December 2021. The dream run of organ donation in Gujarat continued in 2022, with reaching a magical figure of 100 deceased organ donations in eight months' time and proclaiming Gujarat as the one of the states with highest deceased organ donations in the country. The Civil Hospital, Ahmedabad had set an example and bench mark for the rest of the government hospitals and medical colleges in India with its exemplary contribution to the deceased donation program.

The Gujarat model showcases a multi-pronged approach for successful deceased organ donation progarm, which includes

- Government initiative, policies and impetus
- Dedicated and committed involvement from the medical community
- Relentless work and perseverance from the NGOs
- Media involvement for spreading and highlighting awareness about organ donation
- Government hospitals and medical colleges taking initiatives to increase organ donation

If these measures are taken into consideration, it will not take long to reach an organ donation rate of 10 per million population. With increasing organ donation, it is essential to have a fair and transparent organ sharing policy and this shall be achieved through bodies like National Organ and Tissue Transplant Organization (NOTTO). It is worth considering best practices followed across the world such as the UNOS model (United Network for Organ Sharing).

Organ Retrieval Workshop

Safe organ retrieval is the cornerstone of successful organ transplant program. There is no established training mechanism in India for surgeons who wish to develop skills in organ retrieval technique.

Organ retrieval workshop had been held annually in collaboration with Oxford University Teaching Hospitals to train surgeons in safe organ recovery from deceased donors. The Indian Society of Organ Transplantation, Liver Transplantation Society of India, and National Organ and Tissue Transplant Organization (NOTTO) have all endorsed it. The workshop had also received the BMJ Award for Medical Education for its significant contribution to safe organ retrieval.

The retrieval workshop was conducted on September 3 & 4, 2022 at the MS Ramaiah Advanced Learning Centre in Bengaluru, which is one of the country's leading teaching anatomy laboratories. The course was carefully designed in collaboration with international leaders in organ transplantation to train aspiring transplant surgeons and improve them with the tips and techniques for a safe organ recovery. A total of 34 surgeons from all over India were trained in organ recovery using deceased donors.

The workshop had a series of lectures, educational videos, and exclusive lab based practical sessions. The workshop included a live webcast of a retrieval procedure on an anatomical specimen (cadaver model), which included heart, liver, and kidney retrieval on the following sites: ISOT, MOHAN Foundation, NOTTO, and transplantationliver.com.

There was an entirely separate module for renal surgeons which covered renal-only retrieval (in situations where there are no multi-organ surgeons to retrieve). Renal surgeons had an opportunity to perform renal implantation in a cadaver under the guidance of dedicated renal tutors for the lab work. The workshop included a new session on retrieval of pancreas for transplantation as well.

The liver /abdominal surgeons were able to participate in the split course, where liver resections could be performed on the explanted livers. The cardiac surgeons had an opportunity to perform both explant and implant of the graft. The lung retrieval module was introduced this year as part of the workshop curriculum.

MOHAN Foundation, supported the below candidates from government medical colleges across the country.

1.Dr Abhay Kumar, Assistant Professor, Department of Surgery, Sir Sayajirao General Hospital (SSGH), Vadodara

2.Dr Syed Sajad Nazir, Prof & Head, Dept of Urology & Renal Transplant, Super Specialty Hospital, Govt. Medical College, Srinagar J&K

3.Dr Tanveer Iqbal, Associate Professor, Dept of Urology & Renal Transplant, Super Specialty Hospital, Govt. Medical College, Srinagar J&K

4.Dr Elias Sharma, Prof & HOD, Urology, Government Medical College, Jammu, Nodal Officer, SOTTO (J&K)

5.Dr Suresh Goyal, Assistant Professor, Urology, AIIMS Bathinda


Faculty and delegates at the National Organ Retrieval Workshop


Practical sessions at the wet lab


Back-bench preparation at the retrieval workshop

Feedback

The whole experience was fantastic. The content of the program was relevant, the faculty was very experienced and leaders in the field, the support staff were very helpful and polite, the audio-visual stream was flawless, the wet lab was state-of-the-art, and the cadaver dissection was almost real. Dr. Sonal Asthana coordinated the program very well, and Mr. Delson was very helpful. I have gained confidence in kidney retrieval from a deceased donor and will shortly translate it to reality. Thanks, MOHAN Foundation, for giving me the opportunity and supporting me in the last minute.

Dr. Elias Sharma, Prof & HOD, Urology, Government Medical College, Jammu, Nodal Officer, SOTTO, J&K

Thank you very much, MOHAN Foundation, for this workshop and the training for organ retrieval. I am again thankful to you and Shroff sir for selecting me and helping me and our hospital with organ transplant and retrieval training.

Dr. Abhay Kumar, Assistant Professor, Department of Surgery, Sir Sayajirao Gaekwad Hospital, Vadodara

Aye Zindagi - Life Finds a Way

Based on an incredible true story, Aye Zindagi is a Hindi-language film starring veteran South actress and 3-time National Film Award winner Revathy in the lead role. The story is about organ donation and liver transplantation, it showcases ethical organ donation and promotes the good that comes from it. As Dr Sunil Shroff, Founder & Managing Trustee, MOHAN Foundation, put it succinctly, "A must watch movie for all of us who believe in the cause of organ donation, it is perhaps the best medical drama made in Hindi."

Aye Zindagi is a very emotional and at the same time an educational portrayal of organ donation and transplantation and tracks what happened in 2004 in Hyderabad. It is based on the true story of Luv Dhody, a liver recipient and Lalitha Raghuram, Country Director, MOHAN Foundation, who was then the grief counsellor, guiding Luv at that time as he was struggling with end stage liver cirrhosis. Unfortunately, tragedy struck the Raghuram family and in a twist of fate, Lalitha lost her 19-year-old son Swamy Narayan to an accident and the Raghurams' took the decision of donating his organs to the needy, giving life to others, including Luv. Aye Zindagi charts the relationship between the two main protagonists and portrays the powerful message of organ donation. It showcases how the altruistic act of donation changes lives with so much positivity and brings hope to the recipients.

Dr Anirban Bose, the writer and the Director of the film, is the Associate professor of Medicine and Nephrology at the University of Rochester in Upstate NY. Advisory Member to MOHAN Foundation, Anirban is also an author and scriptwriter, with Harper Collins having published his three books titled Bombay Rains-Bombay Girls, Mice in Men and The Death of Mitali Dotto.

For Anirban, Revathy was always the first choice to play the character of Lalitha and he was thrilled when she agreed. Lalitha Raghuram, who was portrayed by Revathy shared her first reaction on watching the movie. She found the movie extremely well made and felt that Revathy has done a wonderful job. "In fact, everyone had acted very well and Dr Anirban Bose has done a fantastic job of portraying the entire incident so sensitively. As I watched the movie, 'Frame to Frame', I was remembering what happened 19 years ago", Lalitha added.

"Aye Zindagi is a true life story. It is the story of a gentleman I encountered during a fundraiserfor MOHAN USA which raises funds for non-governmental organizations promoting the cause of organ donation and transplantation. His story was so powerful that it brought me to tears. I wanted to get the story out to the world. Initially I wrote an article but a lot of people told me that it would make a great film. Aye Zindagi is such an unusual 'life is stranger than fiction' kind of story, that I felt if I wrote it as a book, it wouldn't be believable."

- Anirban Bose, Director

"We see a lot of movies, which are just entertainment and nothing beyond that, no great achievements. But, this movie has a wonderful life changing message and such a positive one. I think it is time for each and every one of us to think about organ donation. Aye Zindagi is a movie with a message which everyone should watch and act on the message as organ donation is need of the hour!"

- Lalitha Raghuram, Country Director, MOHAN Foundation

"In my career, I have done roles that you could call heroes but in the last couple of years I have witnessed the real heroes in our lives, the medical fraternity. Doctors, nurses, ward boys, ambulance drivers and so many others, without them we wouldn't have survived these toughest years of our lives. Aye Zindagi is dedicated to all of them. Aye Zindagi is based on an incredible true story and I am sure that you will have a fulfilling experience watching it."

- Revathy, Actress

When asked, would you like to add or change anything, Lalitha Raghuram replied with her usual candidness and simplicity that she did not have anything to change or add to the movie. Lalitha emphatically said that the movie was complete in itself with an amazing message. The wonderful cast has done complete justice to the characters and the story.

Anyone who watches Aye Zindagi feels overwhelmed and shaken. When asked the core idea behind making this movie, Anirban mused that he was really hopeful that people will watch this film and take the underlying message which is that organ donation not only saves lives, it transforms lives.

This film can help them understand that organ donation and transplantation is one of the miracles of medical science like vaccines and antibiotics, but unlike these two, transplantation has the human element. "When we ask someone to donate the organs of a loved one, they are in the midst of a great loss, they are in grief and yet in the middle of their grief they can empathise with another human, a stranger, someone they will never meet, never get anything from him. This is the amazing beauty of organ donation. It brings out the beauty of humanity, the fact that we can empathise with someone else, be in someone else's shoes and feel their loss and suffering in the midst of our own crisis", said Dr Anirban.

The producers of the film are Shiladitya Bora and Anirban Bose. They both have become ambassadors of organ donation. They hope that people will sign up and pledge for organ donation after watching Aye Zondagi and realise that there is so much good to be had by becoming organ donors. "I hope it has a successful run but more than that I hope it has an impact and the movie can be transformative as far as society is concerned," Dr Anirban added.

Movie screening at Jaipur

This bittersweet saga will tug at your heartstrings

Aye Zindagi (Drama) ★★★★
Cast: Revathi, Satyajeet Dubey, Sawan Tank, Mrinmayee Godbole
Direction: Anirban Bose
Duration: 1 hr, 44 min
Language: Hindi (U)

A 26-year-old software engineer and liver cirrhosis patient, Vinay Chawla, has six months to live unless he undergoes liver transplant surgery. As he tides over various challenges, he bonds with the hospital's grief counsellor, Revathy Rajan, as they wait for a liver donation for his surgery. As an incident drives them apart, will they reconcile?

The film opens with Revathy Rajan (Revathi) preparing to persuade a couple to donate their deceased family member's organs but is bluntly turned down at first. The powerful sequence sets the movie's tone and tells you what to expect in the 104 minutes of its runtime — a heartrending story about loss, despair, and estrangement, but equation with her family have charming depictions. Combined with stellar editing, the taut narrative keeps one hooked. When one thinks that the surgery forms the crux of the movie, Anirban surprises with another compelling track.

Aye Zindagi's strength also lies in its

TIMES OF INDIA
October 13, 2022

Luv Dhody, a young engineer who received Swamy's liver is now in the USA. After watching the movie with his wife Mruthula and two lovely daughters Ira and Ina, Luv wrote to Lalitha Raghuram

"During and after watching movie, all four of us were kept crying - looks like we still not have full realization of what you and your family has gone through. I guess words will never be able to explain this properly and in any meaningful way possible. Will remain indebted and obliged. Deep salute to you and to your family."

- Luv Dhody, Liver Recipient

One-Week Face-to-face Transplant Coordinators' Training Program

Guntur - May 2022

For the first time, a one-week Transplant Coordinators' Training Program was conducted by Jeevandan, Government of Andhra Pradesh in association with MOHAN Foundation from May 16 - 20, 2022 at the NRI General and Super Speciality Hospital, Guntur. The program which aimed to address the training needs of transplant coordinators drew 103 delegates from Andhra Pradesh.

Smt. Vidadala Rajini, the honourable Minister for Health, Medical & Family Welfare, Government of Andhra Pradesh was the chief guest for the inaugural ceremony. While addressing the audience, she reiterated the importance of donating organs and said that such trainings would help the professionals facilitate more donations and thus saving many lives.

Also present at the event were Dr. M. Raghavendra Rao, Director of Medical Education, Dr. K Rambabu, Director, VIMS & Chief Transplant Coordinator, Jeevandan.

The training covered a series of lectures on different aspects of organ donation and transplantation and experts from different hospitals in Andhra Pradesh and Telangana were invited as faculty. Educational films on brain-stem death, brain stem death testing, demonstration of apnoea testing, and hand transplant were shown during the training. A simulation video on approaching families for organ donation was also screened and discussed during the training. The training curriculum included role play which helped the participants understand the organ donation conversation.

Group activity on organ donation pathway

Roleplay on approaching families for organ donation

Film on grief counselling

Mohali - August

Fortis Hospital, Mohali in association with MOHAN Foundation and Chandigarh Kidney Foundation successfully conducted a one-week Transplant Coordinators' Training Program from 22nd - 26th August 2022 at the Fortis Hospital, Mohali. The dignitaries graced the inauguration were Mr. Ashish Bhatia (COO - North and East, Fortis Healthcare), Prof. Dr. Vipin Koushal (Director, Regional Organ and Tissue Transplant Organization (ROTTO), North), Dr Gurbir Singh (Former Medical Director, Fortis Hospital, Mohali), Dr. T S Mahant (Executive Director, Cardiac Sciences, Fortis Hospital, Mohali), Dr. Priyadarshi Ranjan (Director, Renal Transplant, Fortis Hospital, Mohali) and Mr. Sudhir Dewan (Honorary Director - North, MOHAN Foundation).

A total of 122 delegates from different parts of the country (Punjab, Haryana, Delhi, Manipur, Himachal Pradesh and Chandigarh) attended the training program.

The training curriculum included a series of lectures on various topics addressed by faculty from MOHAN Foundation, Fortis Hospital, Mohali and Post Graduate Institute of Medical Education & Research (PGIMER), Chandigarh.

The training was concluded with a valedictory function. The guests at the valedictory were Prof. Dr. Vipin Koushal (Director, ROTTO-North), Dr. Sunil Shroff (Managing Trustee, MOHAN Foundation), Dr. Priyadarshi Ranjan (Director, Renal Transplant Fortis Hospital, Mohali), Mr. Sudhir Dewan (Honorary Director - North, MOHAN Foundation), Ms. Pallavi Kumar (Executive Director - Delhi NCR, MOHAN Foundation). The course completion certificates were presented to the participants who completed the 5-day training programme successfully.

Dr. Sunil Shroff, Managing Trustee, MOHAN Foundation felicitated by Dr. Priyadarshi Ranjan (Director, Renal Transplant, Fortis Hospital, Mohali)

Mr. Sudhir Dewan, Honorary Director - North, MOHAN Foundation speaking on 'Public Education'

A candidate receiving her course completion certificate during the valedictory function

Interview with Dr. Gomathy Narasimhan who Received Woman Leader in Transplantation Award

Women Leader in Transplantation Award 2022 presented to Dr Gomathy Narasimhan (centre) at The Trasnplantation Society Congress

The Woman Leader in Transplantation Award 2022 was conferred on Dr. Gomathy Narasimhan, India's first woman multi-organ transplant surgeon. The award was presented at The Transplant Society (TTS) Congress held in Argentina in September 2022.

Dr. Gomathy Narasimhan is presently Consultant, HPB Surgery and Liver & Renal Transplantation at the Dr. Rela Institute & Medical Centre, Chennai. She pursued her MBBS at Chennai's Kilpauk Medical College and surgical postgraduate degree at the Madras Medical College. She completed her fellowship in abdominal organ transplantation (liver, kidney and pancreas) with the American Society of Transplant Surgery (ASTS) at Baylor University Medical Center, Dallas, USA. She then went to Kumamoto University in Japan to learn more about living donor liver transplant program.

Making history in the operating room as a woman transplant surgeon - Your experience

Being the first or the only female transplant surgeon for a while, it made no difference. It never made me feel less alone, whether I was training for general surgery or in the transplant program. However, the other womenfolk might not have experienced it the same way. Regardless of gender, the transplant program as a whole seeks contribution from different specialities and the fact that more and more women are entering this field in recent times is impressive.

As a female doctor, have you ever faced resistance from the patients?

If at all, it was only an advantage. The transplant process itself necessitates life long association between the doctor and patient and being the female doctor, often it helps the patients feel warmth and comfort.

Gender and transplant - Global perspective and your views

The TTS 2022 seminar on 'Impact of gender on equity and access to transplantation worldwide' helped grasping the global picture. The delegations showed that the number of female patients diagnosed with kidney diseases is more when compared to male patients, whereas the number of females receiving a kidney transplant is lesser than male recipients.

It was also found that female donors accounted for the majority of the living donor transplants across the world. This indicates that gender disparity is prevalent in every aspect of the transplant program. It was interesting to note that when we retrospectively reviewed living donor liver transplant data at our centre, it was found that the number of female versus male donors was almost the same.

Have we made progress in transplant surgery training in India? Do we still need to look overseas for training?

There was no liver transplant program back then in India. Those who desired to become a liver transplant surgeons had no choice but to travel abroad to pursue their training. It's no longer necessary to do that. The volume of liver transplants performed in India is huge and over the years the living donor liver transplant program has been well-established in our country. Although it isn't uniform throughout the country, the deceased donor transplant has also seen a huge leap in some parts, especially in the South. With the current scenario, there is no need to look overseas for transplant training per se. In fact, professionals from the East and the West now consider India for training, particularly for liver transplant training.

Nevertheless, travelling is always beneficial as it offers a new perspective on everything. It is all the more important when it comes to disciplines like transplant, because there are many other factors involved besides medical and surgical aspects.

How professional bodies like Indian Society of Organ Transplantation can contribute for transplant training activities?

The best course of action going forward will be establishing an international exchange program. Just as important as learning what other programs have to offer their patients, the world needs to know about our program as well. Rather than limiting ourselves with technical training, bodies like ISOT shall facilitate platforms for exchange program. This would help the young professionals to learn best practises as well as global perspectives.

Views on possible new areas that we need to focus

Metabolic syndrome is becoming an aetiology more common in both liver and renal transplantation. The number of liver transplants performed in people with non-alcoholic steatohepatitis (NASH) is on a huge rise not only in our country, but worldwide. It is crucial that these individuals receive holistic post-transplant rehabilitation. There should be more focus on making these individuals to understand the importance of maintaining healthy lifestyle after a transplant, including balanced diet and physical activity. Failing to this, chances are that these recipients will develop fatty liver disease in a few years time, defeating the purpose of transplant.

Message to those who aspire to become transplant surgeons

What makes the difference between a good surgeon and a great surgeon is attention to detail. It is important that we work as a team as good healthcare is always a teamwork, it is more so in fields like transplant.

ICU Workshop on Deceased Organ Donation at Medicover Hospitals, Visakhapatnam

On 14th May 2022, a one-day Workshop on Deceased Organ Donation for ICU professionals was conducted by MOHAN Foundation in collaboration with Medicover Hospitals, Visakhapatnam under the aegis of Jeevandan, Andhra Pradesh. This workshop was designed particularly for ICU professionals covering the medical and legal aspects of brain death and counselling aspects of organ donation. The workshop was supported by the SBI Foundation and SBI Card. It drew 41 participants including the intensive care professionals and critical care staff from different hospitals in Visakhapatnam.

Inauguration of the workshop

The inaugural ceremony was graced by Dr. K Rambabu (Director - VIMS & Chief Transplant Coordinator- Jeevandan, Andhra Pradesh), Dr. Satya Vara Prasad (DME[Academic], Govt. of Andhra Pradesh) Mrs. Lalitha Raghuram (Country Director, MOHAN Foundation).

The workshop had panel discussions on 'Potential Organ Donors in Neurosurgery' moderated by Dr. T. Mohan. S. Maharaj (Director - Critical Care, Medicover Hospitals) and 'Managing Brain Dead Organ Donors in ICU - Case Discussion' moderated by Dr. Varalakshmi (Department of Critical Care, NRI Hospitals, Vijayawada).

Panel discussion on managing brain dead organ donors in ICU

Hands-on Training Workshop on Deceased Organ Donation at Artemis Hospital, Gurugram

Dr Muneet Kaur Sahi, Programme Manager, MOHAN Foundation addressing the audience

Participants watching the film on counselling

Ms. Pallavi Kumar, Executive Director, MOHAN Foundation explaining the steps involved in DOD

On October 28, 2022, MOHAN Foundation was invited to conduct a hands-on training workshop on Deceased Organ Donation (DOD) at Artemis Hospital, Gurugram after the hospital identifying the need to educate nursing and social work staff on the subject, deceased organ donation.

The goal of the workshop was to describe the role of a deceased donor transplant coordinator in the DOD process, to enhance knowledge about approaching and counselling the bereaved families, to learn the procedures involved in coordinating deceased organ donation in medico-legal cases (MLC). The workshop also aimed at training the participants to monitor family dynamics and to ensure that they identify and respond to family needs. A total of 16 attendees including nursing staff from the intensive care units (general & neurology), patient care support services, nursing educators, psychologist, and security personnel attended the workshop.

Hands-on training activity - Forms of the THO and Tissues Rules, 2014

Organ Donation Process in Medico-Legal Cases
Training Workshop for Police Personnel at DCP Headquarters, Gurugram

On October 20, 2022, MOHAN Foundation Delhi-NCR organized a training workshop on the organ donation process in Medico-Legal Cases (MLC) - Role of Police at DCP Headquarters, Gurugram. The training was attended by Inspectors, Sub-Inspectors and Assistant Sub-Inspectors (ASI) from 30 police stations under Gurugram Commissionerate, Government of Haryana.

The aim of the workshop was to make the police personnel understand the concept of organ donation, their role in MLC and the process of organ donation in such cases. The faculty from MOHAN Foundation included Ms. Pallavi Kumar, Executive Director, Dr. Muneet Kaur Sahi, Programme Manager, Ms. Simran Anand & Ms. Preeti Goswami, Programme Officers.

Apart from the basic concepts of organ donation and transplantation, the workshop addressed the following

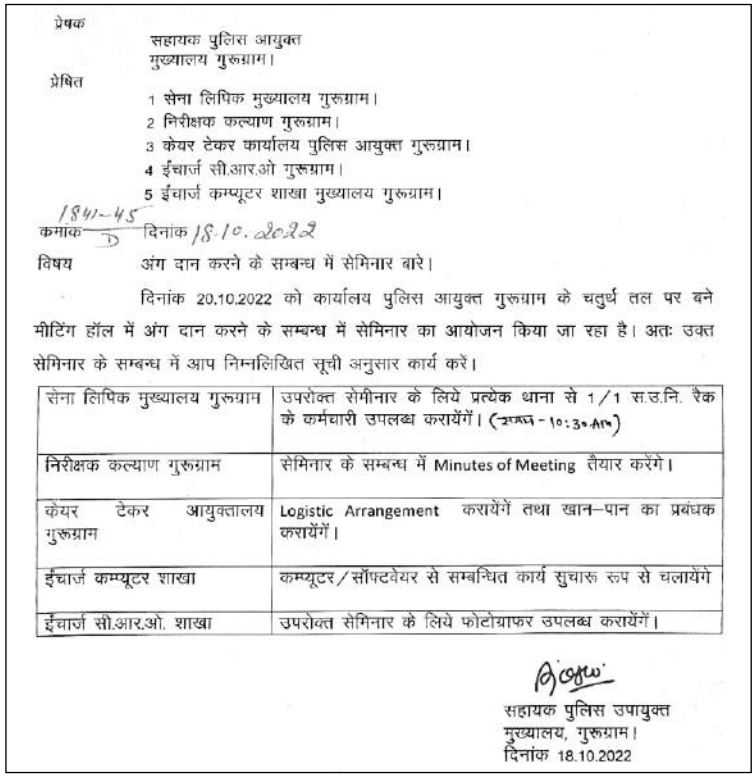
- Laws & rules governing death in India
- Section 6 of the Transplantation of Human Organs Act, 1994
- Organ donation in Medico-Legal cases (MLC)
- Role of police in deceased organ donation
- Duties of the investigating officer in an MLC
- Formalities and forms for family consent for organ donation
- Post organ retrieval process

Ms. Pallavi Kumar explaining the role of police officers in MLC

Dr. Deepak Mathur, Forensic Specialist, Civil Hospital, Gurugram, explained his role and the coordination between the hospitals, police and forensic department in a medico-legal case. During the workshop, posters on "Organ Donation Process in Medico-Legal Cases" and pamphlets on organ donation were shared so that each police station could have access to this information. Close to 30 police personnel attended the workshop and supported the cause of organ donation.

Sharing by Hari Krishan, ASI

Mr. Hari Krishan, ASI, Sadar Police Station, Gurugram, shared his experience of his first organ donation medico-legal case at Artemis Hospital, Gurugram, coordinated by MOHAN Foundation. His sharing encouraged his fellow men to take up such cases and not say 'no' citing ignorance and system-based protocols. He said, quote unquote, "Coordinate one such case and you will feel good." He has also pledged to be an organ donor with the Foundation.



प्रेषक

सहायक पुलिस आयुक्त
मुख्यालय गुरूग्राम।

प्रेषित

1 सेना लिपिक मुख्यालय गुरूग्राम।
2 निरीक्षक कल्याण गुरूग्राम।
3 केयर टेकर कार्यालय पुलिस आयुक्त गुरूग्राम।
4 ईंचार्ज सी.आर.ओ गुरूग्राम।
5 ईंचार्ज कम्प्यूटर शाखा मुख्यालय गुरूग्राम।

कमांक 1841-45/D दिनांक 18.10.2022

विषय अंग दान करने के सम्बन्ध में सेमिनार बारे।

दिनांक 20.10.2022 को कार्यालय पुलिस आयुक्त गुरूग्राम के चतुर्थ तल पर बने मीटिंग हॉल में अंग दान करने के सम्बन्ध में सेमिनार का आयोजन किया जा रहा है। अतः उक्त सेमिनार के सम्बन्ध में आप निम्नलिखित सूची अनुसार कार्य करें।

सेना लिपिक मुख्यालय गुरूग्राम	उपरोक्त सेमीनार के लिये प्रत्येक थाना से 1/1 स.उ.नि. रैंक के कर्मचारी उपलब्ध करायेंगें। (समय - 10:30 AM)
निरीक्षक कल्याण गुरूग्राम	सेमिनार के सम्बन्ध में Minutes of Meeting तैयार करेंगे।
केयर टेकर आयुक्तालय गुरूग्राम	Logistic Arrangement करायेंगें तथा खान-पान का प्रबंधक करायेंगें।
ईंचार्ज कम्प्यूटर शाखा	कम्प्यूटर/सॉफ्टवेयर से सम्बन्धित कार्य सुचारू रूप से चलायेंगे
ईंचार्ज सी.आर.ओ. शाखा	उपरोक्त सेमिनार के लिये फोटोग्राफर उपलब्ध करायेंगें।

सहायक पुलिस उपायुक्त
मुख्यालय, गुरूग्राम।
दिनांक 18.10.2022

Making Transplants Affordable - An Initiative by MOHAN Foundation

"Anudaan - Making Transplants Affordable" is an initiative launched by MOHAN Foundation in the year 2021 as a mark of its journey towards saving lives for the last 25 years. This initiative aims to provide financial assistance to the economically underprivileged, thus enable access to life-saving transplants. Most transplants take place in the private sector and the prohibitive costs makes them inaccessible to the poor. Since hardly any government hospitals perform transplants, affordable transplants remain elusive to the poor. Anudaan has been providing partial contribution to the transplant cost of individuals and has been working with hospitals to bring down the transplant costs.

It is being supported by philanthropic individuals and corporate houses such as Century Plyboards India Limited, Edelweiss Tokio Life Insurance, Ethos Watch Boutiques and BNP Paribas. MOHAN Foundation also partners with likeminded organisations such as THPF (Transplants Help the Poor Foundation), TANKER Foundation and MFJCF to name a few to share the transplant costs. We have also been raising funds on Milaap, our Crowdfunding partner. This quarter we were able to support the transplant of six individuals, many of them being children under the age of 10 years. Anudaan aims to touch the lives of these individuals and help them achieve their aspirations.

adani Foundation

Adani Electricity Mumbai Limited (AEML) and Adani Foundation have joined hands with MOHAN Foundation's 'Anudaan - Making Transplants Affordable' for extending part support to patients battling organ failure and unable to afford transplants. We hope to reach out to more underprivileged patients, specially children, with this support.

Tribute to Mr T N Venkatesan

"May the roads rise up to meet you.
May the wind be always at your back.
May the sunshine warm your face.
And until we meet again,
May God hold you in the palm of his hand."

"I won't be far away, for life goes on. Just listen with your heart and you'll hear my love all around you." - This is how we at MOHAN Foundation remember Mr. T N Venkatesan, who left this world on September 10, 2022

Mr T N Venkatesan was a philanthropist and a visionary. When his own daughter underwent a kidney transplant in the year 2010, he realized the need for supporting the underprivileged so that they may have access to such life-saving treatment. His initial grant to MOHAN Foundation saw the genesis of "Anudaan - Making Transplants Affordable" - a very special initiative that directly impacts lives by enabling lifesaving transplants for poor people. His support strengthened our belief and gave us confidence to reach out to other philanthropists and build on this initiative. He continued to contribute towards Anudaan right till the very end, saving many lives specially those of children.

Mr Venkatesan – you will be missed and we promise to continue to honour your legacy by continuing to support lifesaving transplants for those who cannot afford them.

15th Annual International Conference of NATCO, October 15-16, 2022, Nagpur

A two-day conference was organised by the Network and Alliance of Transplant Coordinators (NATCO) on October 15 -16, 2022 at Nagpur. NATCO is a national body of transplant coordinators that is committed to professional development of transplant coordinators and advancement of organ and tissue donation in India. The theme of the conference was "Power of You" indicating that the transplant coordinators have the strength to overcome the two years of pandemic and get back to helping organ failure patients. The conference was held under the aegis of Indian Society of Organ Transplantation (ISOT) which was inaugurated by Hon. Union Minister of Roadways and Transportation Shri Nitin Gadkari.

Around 80 transplant coordinators from various corners of the country attended the conference. The conference was inaugurated in the presence of Dr. Sunil Shroff (President, ISOT) and Dr Vivek Kute (Secretary, ISOT) with the release of the proceedings of the 14th NATCO Conference.

A wide range of topics were covered at the conference including the following:

- Donation after cardiac death
- Advocacy for living donors
- Safeguarding transplant coordinators in living donation
- Reducing the time for organ transport
- Role of palliation in transplants

Padma Shree Dr Rani Bang, Founder Director, SEARCH (Society for Education, Action and Research in Community Health), Gadchiroli delivered the Swami Narayan Memorial oration. She spoke of her journey in improving the health of tribal of central India by using evidence medicine and policy changes. She spoke of the importance of integration of local belief systems and practices in her work. Her oration inspired the transplant coordinators.

Many national and international speakers of repute spoke at the conference. Some of the international speakers were Dr Gabriel Oniscu (President, European Society of Transplantation), Dr Chandra Bhati (Professor of Surgery, University of Maryland School of Medicine) and Mr Tony van de Bospoort, Hospital Art Studio, UK.

Mr Sanjay Prakash, MD and CEO of SBI Foundation graced the valedictory function and gave away the 'Swamy Narayan Best Transplant Coordinator Award'. The winners of the award were Ms Hemalata Parmar, Indore and Ms Neha Sharma, Chandigarh. The 'Dr Amalorpavanathan Best Scientific Paper' was awarded to Ms KKD Surekha, Vijayawada and the best poster was given to Ms Srividya Subramanian, Hyderabad.

The conference was supported by SBI Foundation, SBI Card, ZTCC Pune, MOHAN Foundation, C-Edge, ISOT and ZTCC Nagpur.

Release of the proceedings of the 14th NATCO conference: (L - R) Mrs Arati Gokhale (President, NATCO), Dr. Sunil Shroff (President, ISOT), Dr Vivek Kute (Secretary, ISOT)

'Swamy Narayan Best Transplant Coordinator Award' presentations chaired by Dr Arpita Roychowdhury (Chairperson - ROTTO, Kolkata) & Dr Archana Kumari (Consultant - Coordination, NOTTO)

Moderators of Scientific Paper Presentation (L - R) Ms Vrinda Pusalkar (Jehangir Hospital, Pune), Mrs Arati Gokhale (President, NATCO), Dr. R Krishnamoorthy (SIMS Hospital, Chennai) and Dr. Sanjeev Nair (Saveetha Medical College, Chennai)

Padma Shree Dr Rani Bang, Managing Director, SEARCH, Gadchiroli, delivering the Swami Narayan Memorial Oration

Mr. Sanjay Prakash, MD & CEO, SBI Foundation addressing at the valedictory function

Section of the audience at the conference

Organ Donation Awareness Programs

Cycle Rally

Inauguration of the cycle rally

Guests supporting organ donation

Cycle rally

Distribution of awareness pamphlets

An awareness cycle rally was organized by S A College of Arts and Science (SACAS), Chennai in association with MOHAN Foundation on August 12, 2022. 73 students and a volunteer from Hyundai participated and cycled 32km spreading awareness. The Tamil Nadu Police extended their support by escorting the cyclists throughout the journey. The Madras Medical Mission Hospital supported the event with medical professionals and an emergency ambulance. Through the 32km journey, over 650 awareness pamphlets were distributed and over 80 organ donation helpline stickers were struck on the vehicles.

Art Installations

'Organ Donation Awareness Exhibition' with installations curated by Inter National Institute of Fashion Design (INIFD) and Kamla Poddar Institute, Jaipur was inaugurated on August 7, 2022 at MFJCF Office (MOHAN Foundation - Jaipur Citizen Forum). The artwork put forth the idea of organ donation and honour to the deceased donors in a beautiful, heart-touching creative manner.

Flash mob

Metro Stations and Irrum Manzil Mall, Hyderabad

On July 16, 2022, MOHAN Foundation in association with Kosmic Dance School and Ultimate Sound Pro conducted a series of flash mob at the metro rail stations in Hyderabad to sensitise the masses on organ donation. The dancers were between the age of 9 and 20 years who kept the audience hooked with their moves. This was the first time that such a event was performed at three metro rail stations where the dancers performed flash mob at a particular station and boarded the metro train to perform at the next metro station. This unique effort made the event a "Iconic" and "first-of-its-kind" in the state of Telangana. The event was culminated with a final performance at the Irrum Manzil Mall. Close to 2,000 people were sensitised through this effort and about 1500 people pledged to donate their organs and tissues.

Flash mob at Ameerpet Metro Station

World Trade Park, Jaipur

Students displaying Toll Free Number during the flash mob

Audience joining the dancers

On August 13, 2022, MFJCF and Delhi Public School, Jaipur organized a Flash mob at World Trade Park to spread awareness about organ donation. As the students swung to modern beats and songs of patriotism, many joined the campaign to support the cause. Around 300 people pledged as organ donors and registered for a donor card.

Awareness drive using traditional art forms

Nexus Forum Vijaya Mall, Chennai

An organ donation awareness drive was conducted at the Nexus Forum Vijaya Mall, Chennai from September 15 -18, 2022. As part of the drive, a street play was performed by the students of Madras School of Social Work (MSSW). A bunch of volunteers from an NGO called Candles performed folk dances of Tamil Nadu with traditional music instruments such as Parai and Thavil. 'Life Before Ashes' - Art installations of human organs with the hard-hitting message - 'What has now become ashes, could have been another person's heart or kidney, if only the organs were donated' were kept for display throughout the event.

Folk dance performance at the Nexus Mall

Students pledging to support organ donation

Jigsaw puzzle activity

Dr. Gayathri, Actor & Social Activist addressing the public

MOHAN FOUNDATION

Project
GIFT HOPE, GIFT LIFE

Supported by
SBI FOUNDATION Service Beyond Banking
SBI card

Gift Hope, Gift Life | www.mohanfoundation.org

Initiation of Organ Donation & Transplantation Program in Manipur

Unique Scalable Indian Model

- Collaborative
- Cost-effective
- Culturally sesnitive

Uneven distribution of organ donation activities in India. Negligible activities in North-East and their citizens travel to other states for treatment or die for want of an organ.

Dire need to build capacities across India, in Government Hospitals and to give access to life-saving organ transplant to the economically weaker section

2017

In a farsighted & path breaking move, SBI Foundation funds MOHAN Foundation to start work in North-East

DEC - MF conducts First CME on deceased organ donation in Manipur. Close to 200 attend.

MF facilitates advance training for Dr Sholay Meitei Urologist, JNIMS (government hospital) at the University Hospital Coventry & Warwickshire, UK

2019

JAN - First stakeholder's meeting involving private and government. hospitals, police, forensics held. Gap analysis done and immediate needs identified

MAY - MF is formally recognized as a 'Knowledge Partner' for public education and capacity building, by the Dept of Health Services, Manipur

JUN - MF conducts Workshop on Brain death and organ donation for 90 Intensivists, Critical care nurses & Post Graduates from JNIMS, RIMS, Shija Hospital & others

DEC - Brain Death Committee formed

2020

Post COVID, multiple visits and meetings with various stakeholders

2021

Several public education programs were conducted

2022

APR - MOHAN Foundation's office established in JNIMS and trained personnel were hired

JUN - For the first time in Manipur, three living donor kidney transplants were performed successfully, with close assistance and support from MOHAN Foundation

Manipur: JNIMS carries out three kidney transplants, scripts history

Terming the operation a huge achievement, Manipur CM N Biren Singh announced a reward of Rs 5 lakh for the team of doctors, nurses and other staff that conducted the operation at JNIMS