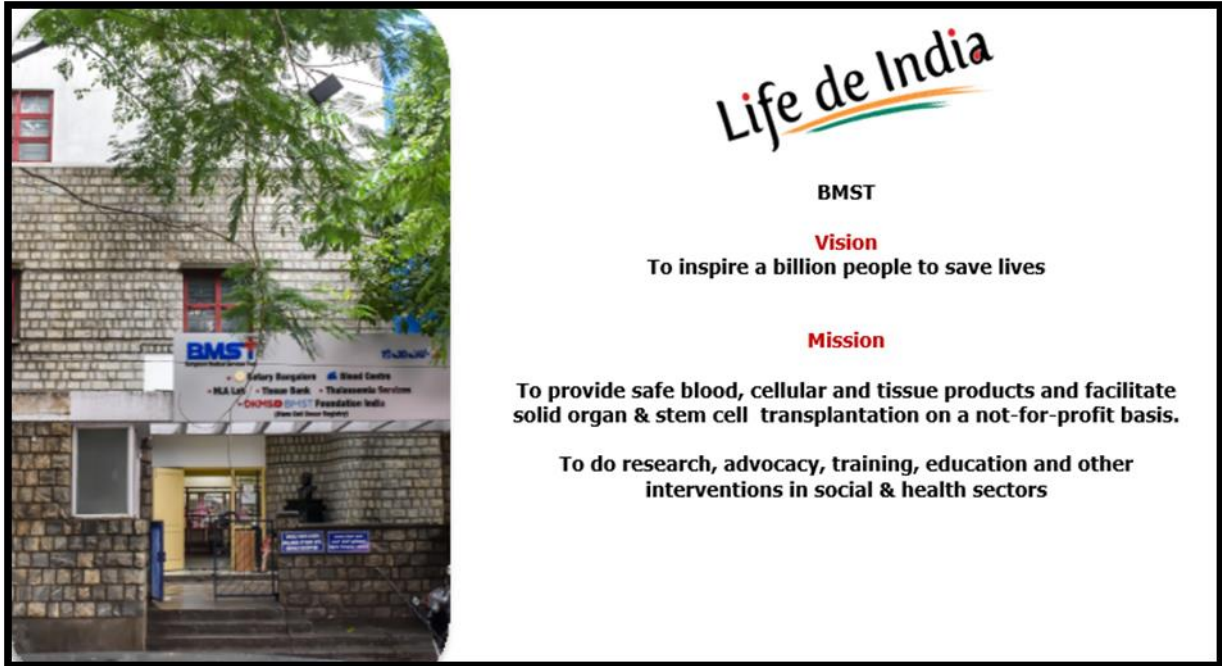


★ Rotary Bangalore Blood Centre

★ HLA Lab ★ Tissue Bank ★ Thalassemia Services

★ Stem Cell Donor Registry (DKMS) BMST Foundation India)



Annual Report - April 2021 to March 2022

Bangalore Medical Services Trust (BMST) was established by the Rotary Club of Bangalore and TTK & Company in 1984. As a charitable Trust, BMST has 80G IT exemption, and is registered under 12A & FCRA.

BMST is the only NGO, standalone organization in India which has a blood centre, a tissue bank, HLA Lab & Stem Cell Registry and therefore provides a wide spectrum of services in the field of blood, organ and cellular therapies

BMST verticals:

1. Rotary Bangalore TTK Blood Centre, BMST

The blood centre is licensed by DCGI. Blood is collected from voluntary donors only at blood donation camps held at industries and colleges. It is screened for transfusion transmissible infections by Chemiluminescence and NAT. In order to optimize use, it is processed and issued as blood components.

- It is the Regional Blood Transfusion Centre, Karnataka

- It functions as the Immunohematology Reference Laboratory to solve blood group and cross-match problems for South India
- It is the first and only NGO blood centre in Karnataka to be accredited by the National Accreditation Board for Hospitals (NABH)
- It is the first blood centre in Asia to be given Quality Certification by the American Association of Blood Banks (AABB)

| Rotary Bangalore TTK Blood Centre, BMST | | |
|---|--------------------|-----------|
| Total Voluntary Donor base > 6L | | |
| | 1984 to March 2021 | 2021 - 22 |
| Voluntary Blood Donation camps | 6,800 | 294 |
| Units collected | 5,90,694 | 18,041 |
| Components issued | 10,97,766 | 39,022 |
| Free issues to poor patients, Government Hospitals and Thalassemia patients | 1,17,830 | 4,750 |
| Number of patients benefitted | 9,46,998 | 26,015 |

Feedback from some Industries supporting us with blood donation camps:

“It is always a pleasure to work with BMST for blood donation camps. We would like to hold more such camps. The Team is quite professional and handles the events themselves. Nice Work.”

Praveen Kulkarni, Intuit

“We are proud to be associated with Rotary ttk blood bank for this CSR activity. The blood donation camp was well coordinated. Thank you for your efforts.”

Vijay Kumar, Unisys

2. Thalassemia Program

At BMST’s day care transfusion centre, blood transfusions are given free every month for patients with Thalassemia, Hemophilia and other hematological disorders who need regular, repeat transfusions. We support around 100 patients, with 2100 free blood & transfusions p.a.

The Thalassemia Prevention and Control Programme - Relatives of about 450 Thalassemia patients from all over Karnataka were tested for Thalassemia carrier status and given genetic counseling. The Carrier status in our study was around 34%.

Testimonials:

Friendly staff, excellent service, high professionalism and safe blood because of NAT (test). We were travelling every 3 weeks from Hyderabad to Bangalore to get the blood transfusion for my daughter for more than 2 years till we shifted to Bangalore recently.

Mother of a Thalassemia patient

Excellent quality, tested blood provided free of cost at TTK is a boon to people with thalassemia. Apart from the quality of blood provided, we get excellent care thanks to a skilled nurse who ensures pain-free transfusion for children and adults. Blood transfusion is the mainstay of a thalassemic’s life and by providing this basic service TTK is much appreciated by everyone. Apart from clinical care, we also receive a healing touch at TTK because of the warm, affectionate staff and cheerful nurse who takes care of us during transfusions

Namitha Kumar who has been using the blood transfusion services since 1991

3. Transplant Immunology Laboratory (HLA lab)

- The HLA lab is NABH accredited and is one of the few labs in India using the latest technologies and test methods to meet International standards.
- We do all tests required for both solid organ as well as Stem Cell Transplants including NGS based HLA typing, antibody identification, Cross Match and PRA.
- We support the State Organ and Tissue Transplant Organization (SOTTO) for deceased (cadaver) donor transplants.

| Transplant Immunology Laboratory (HLA lab) | | |
|---|--------------------|------------------|
| | 1994 to March 2021 | 2021 - 22 |
| Number of tests done | 28,093 | 3,337 |
| Number of patients benefitted | 11,237 | 1,334 |

4. Tissue Bank (JD(M) | HOTA | 10 | 2019 -20)

- The tissue bank procures bones and soft tissues from deceased donors as well as from living donors. Bone fragments which are otherwise discarded after knee & hip replacement surgeries, are collected from these patients with prior informed consent.
- The tissues undergo processing including cleaning, pasteurization, freeze drying and Gamma Irradiation. The bone tissues and bone granules are used by Orthopedic and Dental surgeons in over 100 hospitals, pan-India.

| Tissue Bank, BMST | | |
|-----------------------------|--------------------|------------------|
| | 2010 to March 2021 | 2021 - 22 |
| Number of bones collected | 4,772 | 580 |
| Number of allografts issued | 4,644 | 675 |

Testimonials:

*“TTK Bone Allografts have been a **boon to our patients** since this service has been launched. I have used them frequently for filling bone voids in non-unions of fractures, metaphyseal defects after elevating tibial condylar and distal radius depressed articular fractures and in severely comminuted fractures.*

*Their minimal allogenic properties, availability **in convenient ready-to-use sterile packs** in different weights, no special storage requirements and **cost-effectiveness make** TTK Bone allografts an attractive addition to the armamentarium of our Orthopaedic team at Manipal Hospital, Bangalore.*

Thanks you for providing the service and look forward to our continued partnership”.

Dr. Hemant K. Kalyan

HOD & Consultant in Orthopedics & Sports Medicine, Manipal Hospital, Bangalore

“It’s a pleasure to write a testimonial for your bone graft. As a Periodontist, I use this product in all bone grafting requirements. I use in the product in periodontal surgery and implant surgeries(dental implants) ,what was impressive is its handling characteristics, during the surgery .It’s a one solution for all my grafting requirements like intra bony defects as a part of treating periodontal disease and its used in all implant surgeries like deficient bone sites and sinus augmentation.

The organisation is doing a great service to the country by producing the graft in the country and thereby reducing the cost, which in turn reduces the treatment cost. I hope the organisation will keep up the good work”

Dr. D. Satyanarayana

M.D.S (Perio), Consultant Periodontist, Private Practitioner, Hyderabad

5. DKMS BMST Foundation India

Set up in 2019 in collaboration with DKMS, Germany, with a mission to give as many blood cancer and blood disorder patients as possible, a second chance at life. DKMS-BMST motivates people and register them as potential Blood Stem Cell Donors. They facilitate the

search for HLA (tissue) type matched donors for patients needing a Blood Stem Cell Transplant to survive.

| DKMS BMST Foundation India | | |
|--|--------------------|-----------|
| | 2015 to March 2021 | 2021 - 22 |
| Blood Stem Cell Donors registered | 45,458 | 19,938 |
| PBSC Donations (number of patients benefitted) | 34 | 21 |

Donor stories:

***Deepika**, a banking professional registered as a potential blood stem cell donor in August 2018 during one of the donor registrations drives at her workplace. In just a year of registration, she got a call on being a perfect match for a patient in need of a blood stem cell donor. On February 14th, 2020, she donated her blood stem cells. Speaking on her journey, Deepika said “Once I was aware of the whole process, I decided to become a blood stem cell donor. Knowing there was someone who urgently needed my blood stem cells made it highly convincing for me to tolerate just a needle prick pain”. She also said, “Donating my blood stem cells was an easy process and on Valentine’s Day was the perfect act of love and care.”*

***Harsh**, an army man registered as a potential blood stem cell donor in July 2019 during his military training and just five months later he came up as a suitable match and was able to donate his blood stem cells to a 39-year-old cancer patient through peripheral blood stem cell collection (PBSC). “In just five months, I received a phone call from DKMS-BMST informing me that I was a possible match for a patient. I said yes straight away to be a potential lifesaver. I had a lot of mixed feelings about the donation because I was unaware of the concept. But all queries were clarified at once and all the required information on the process was explained to me” said Harsh.*

Survivor stories:

***9-year-old girl Grishmitha**, a resident of Kundapura, Karnataka was diagnosed with **Thalassemia** in 2014 and she received a stem cell transplant under Dr. Sunil Bhat at Narayana Health Bengaluru in 2017 through a DKMS donor. Currently she is in 3rd standard, fully recovered and is growing like any other child of her age.”*

***Thalassemia survivor Bibek Singh** is a 12-year-old boy from Ludhiana, Punjab. He was diagnosed with Thalassemia in 2010 and had to undergo blood transfusion every 15 days, until he found a matching donor through DKMS and underwent a stem cell transplant in 2018 under Dr. Joseph John at CMC Ludhiana. Bibek is doing well and has an active lifestyle now.*

6. Training and Capacity Building:

BMST is a designated Training Centre of National Blood Transfusion Council (NBTC) Department of H&FW, Government of India, Karnataka State Blood Transfusion Council, WHO, Asian Association of Blood Banks (AATM), ISBTI, The India Immunohematology Initiative of the International Society of Blood Transfusion (ISBT), and other National and International bodies to provide education, training, capacity building, technical know-how, expertise and support in the areas of Blood Banking and Transfusion, Immunohematology, quality management, HLA and Transplant Immunology. We have also conducted several CMEs, Workshops, conferences etc.

Some important training and skills development programmes carried out by BMST:

- WHO, Quality Management for Blood Banks of South East Asia Region Organizations, for blood centres in India
- Advanced, hands on, training for laboratory diagnosis of Immunohematology problems supported by the India Immunohematology Initiative, International Society of Blood Transfusion (ISBT) conducted annually

Rotary Bangalore TTK Blood Centre, BMST is one of the seven training centres identified by Asian Association of Transfusion Medicine (AATM) for the Fellowship programs for its members. The other centers are Tata Memorial Hospital, Mumbai, Medanta Blood Bank, Gurgaon, Singapore Blood Center, Shanghai Blood Center, China; National Blood Transfusion Center, Sri Lanka and Iranian Blood Transfusion Organization

7. R&D, advocacy:

We play a major role in Policy making for Blood Banking and Transfusion Services at both Central and State level, (NBTC and KSBTC).

Significant achievements, Recognitions & Awards for BMST

- Recognized as a Scientific and Industrial Research Organization (SIRO) by DSIR, Ministry of Science & Technology, Government of India.
- Designated as a specialized laboratory of Rajiv Gandhi University of Health Sciences (RGUHS) and a Centre of Excellence in blood banking, immunohematology and tissue typing for collaborative research and training.
- Kempegowda Award, Karnataka in 2007 in recognition of work in the area of voluntary blood donation.
- Awarded by National AIDS Control Organization (NACO) for 100% voluntary blood donation.
- Awarded every year by KSAPS, for the highest collection of voluntary donor blood.

- Adjudged the best training centre in blood banking and immunohematology in 2014 for the collaborative Blood Safety project in India of NBTC- CMC, Vellore- CDC, Atlanta, and the Christian Medical association of India.

Funding and other support

- BMST has received CSR and individual funding support for infrastructure and specific programs and projects
- The Government of Karnataka awarded a CA site on long lease on which to build and house BMST
- In addition, many people have contributed their time, expertise and effort pro-bono

| Financial support | | |
|--------------------------|----------------------------------|--------------------|
| | Till March 2021 (approx.) | 2021 - 22 |
| Foreign Contribution | ➤ 8 Crore 97 lakhs | ➤ 2 lakhs |
| Domestic Contribution | ➤ 12 Crore 6 lakhs | ➤ 2 Crore 60 Lakhs |

| Some among the several organizations and individuals who gave funding support for infrastructure, programs & projects | | | | |
|--|---------------------------------------|------------------|----------------------|---------------------------------------|
| International & National organizations | Rotary clubs & Rotarians | CSR | | Individual funding |
| National AIDS Control Organization | Rotary Club, Bangalore | TTK Prestige | Synopsys | Col. V. Balakrishnan |
| National Blood Transfusion Council | Rotary International | TTK-LIG | Jindal Foundation | Mrs. Padma Narasimhan |
| National Rural Health Mission | Rotary Club Bangalore Indiranagar | Levi Strauss | DPS, Bangalore South | Mrs. Shanthi Ranganathan |
| Government of Karnataka | Rotary Club Bangalore Jeevanbimanagar | Brooke Bond | Chrysalis High | Dr. Latha Jagannathan |
| Karnataka State Financial Corporation | Hamilton -Master Rotaract Club | Intel Technology | Cognizant Foundation | Dr. Darshan Bhat Dr. Gayathri Bhat |

| | | | | |
|---|----------------------------|-----------------------------|--------------------------|----------------------------------|
| Karnataka State AIDS Prevention Society | Rotary Club Bangalore NW | Mindtree | Aditi Mallya School | Ms. Prachi, Ms. Vidya, Ms. Megha |
| Karnataka State Blood Transfusion Council | Rtn. PDG P.T. Kasturi | Timken | TCIS | Mr. B.V. Srinivas |
| UNESCO | Rtn. Vijayam Krishnamurthy | Optum | Google | Mr. A.P. Prabhakar |
| UNICEF | Rtn. PDG Prabhashankar | Northern Trust | Online Giving Foundation | Ms. Kala Bharath |
| World Bank | Rtn. Dilip Kumar | Ocwen | Give India | Mr. Surendranath D |
| CDC-CSI | Rtn. Zaryll Lobo | Sarojini Damodhar Trust | ICICI Foundation | Mr. Ramesh Parameshwaran |
| HIVOS | Mrs. Ramani Arun Kumar | MCKS Trust Fund | | Ms. Madhu Uthaya |
| Asian Association of Transfusion Medicine | Ms. Preme Row | UK Online Giving Foundation | | Mr. Amrudes |
| WHO | Rtn. Dr. Amarnath | The NASSCOM Foundation | | Mr. Manas Fuloria |

Board of Trustees of BMST:

BMST has 12 trustees, 6 nominees of Rotary Club of Bangalore (RCB) who change every year, and 6 of TTK & Co. The Chairman is a nominee of RCB & the Managing Trustee a nominee of TTK & Co.

| Nominees of TTK & Co | | Nominees of RCB | |
|-----------------------|-------------------------------------|----------------------------|---------------------|
| Name | Designation in BMST | Name | Designation in BMST |
| Dr. Latha Jagannathan | Medical Director & Managing Trustee | Rtn. PDG K.N.Prabhashankar | Chairman |
| Mr. T. T. Jagannathan | Trustee | Rtn. Girish Ramanathan | Trustee |

| | | | |
|---------------------------|------------------------|-------------------------|---------|
| Mrs. Lakshmi Ravichandran | Head Donor Recruitment | Rtn. Gowri Oza | Trustee |
| Mr. M Lakshminarayan | Trustee | Rtn. Nalini Nanjundayya | Trustee |
| Mr. Ramesh Venkateshwaran | Trustee | Rtn. Manjunath Aniekar | Trustee |
| | | Rtn. Sanjay Udani | Trustee |

| BMST's Advisory board | |
|---|---|
| Blood Banking & Immunohematology | Tissue Banking |
| Transplant Immunology | |
| Dr. V. Ravi MBBS, MD, FAMS, FASc Retd. Professor & Head Department of Neurovirology National Institute of Mental Health and Neuro-Sciences (NIMHANS) | Dr. Hemant K. Kalyan HOD & Consultant in Orthopaedics & Sports Medicine, Manipal Hospital, Bangalore |
| Lt Gen Dr. D. Raghunath PVSM, AVSM, PHS (RETD) | Dr. Shankar Kurpad Orthopaedic Surgeon Columbia Asia Hospital, Yeshwanthpur |
| Dr. Aseem Tiwari Director – Medanta Department of Transfusion Medicine | Dr. D. Satyanarayana M.D.S (Perio) Consultant Periodontist, Private Practitioner, Hyderabad |
| Dr. Parvesh Jain HOD, Medical Gastroenterology, Bangalore Medical College | |
| Dr. Nagesh NS, HOD Surgical Gastroenterology, Bangalore Medical College | |

Volunteers at BMST:

Some amongst a number of people who contributed their time and effort pro-bono:

- Dr. Latha Jagannathan, Founding Trustee, BMST and Hon. Medical Director - setting up, expansion and growth of BMST since 1994.

- Ms. Lakshmi Ravichandran, Trustee, BMST – heading the voluntary blood donation program since 1995.
- Ms. Lata Amashi & Mrs. Geetha Santhanam- helping with blood donation camps
- Rtn. PDG P.T.Kasturi and Rtn. PDG Capt. V.V.K. Mani, founder trustees- who garnered funding for infrastructure
- Late Dr. Kamala Balakrishnan, an expert in Blood Banking, Immuno-hematology and HLA – supporting with expertise & training for HLA.
- Dr. Darshan Bhat, Mr. V. Shenoy & Mr. Gurumurthy –helping with QMS
- Mr. Pratap -developing “Hemotrace”, the software for BMST

Testimonials from facility visitors:

Congratulations on an effort which is useful in Bangalore. Deeply impressed with the international standards maintained. Bangalore is fortunate to have this institution.

S M Krishna || Deputy Chief Minister, (later Chief Minister), Government of Karnataka || 14th June 1992

I am indeed pleased that my friend Kasturi has brought me this morning to the temple of service. Truly an abode of the Lord. My good wishes for the whole work being carried out by Dr. Latha and her colleagues. God bless.

O P Vaish || RI Director 1999-2001 || Rotary Foundation Trustee 1991-1994 || 25th June 1993

It is projects such as this that bring to notice of the public the concept of Rotary. This blood bank is in the highest traditions of Rotary!

Hugh Archer || Past President RI || Chairman, Rotary Foundation || 13th December 1994

It gave me great pleasure and satisfaction to see this state of the art blood bank developed by Rotary International and TTK People. I wish we have many more centers of this nature in our country which can really promote the concept of Voluntary Blood Donation in a big way – which is the need of the hour. Keeping in view the big threat of AIDS likely to affect our motherland also in this decade itself. All my good wishes and congratulations to the staff, doctors and of course the promoters of the concept.

Dr. Harsh Vardhan || Minister of Health, Law, Justice and Legislative Affairs || Delhi Government || 19th September 1995

If I had a wish it would be to have a facility like this in every part of India

Ms. Renuka Chowdhury, Member Rajya Sabha || 28th October 2009