

A Proposal for
Funding One Hundred Heart Operations Every Year
For Children From Poor Families In India By the
Dr.Mani Children Heart Foundation

Submitted by:

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The Dr.Mani Children Heart Foundation
<http://www.CHDinfo.com/mission/>

Executive Summary

The Dr.Mani Children Heart Foundation is a not-for-profit charitable organisation founded in Chennai, India in August 2003 to fund and sponsor life-saving heart surgery for children born with Congenital Heart Defects (CHD) from poor families.

The Foundation has already sponsored heart operations for 11 children, and all were performed successfully at an average cost of Rs.75,000 (approx.US \$1,700) per operation.

There are over 50,000 children with heart birth defects awaiting treatment in the state of Tamilnadu, India alone. Most are from economically weaker sections of society and cannot afford the steep costs of treatment.

To scale up the activities of the Foundation, a corpus of US \$4 million is being sought as a donation that will be invested in Indian Government backed securities (viz. non-transferable Reserve Bank of India Relief Bonds @6.0% p.a., tax free).

The interest payments will be used to fund the expenses of **100 heart operations a year**, at an average 'per patient' cost of Rs.100,000 (approx. US \$2,250), which will include reserves to cover the cost of any unforeseen complications as well.

CORPUS: Rs.180,000,000 (approx. US \$4,000,000)
(Invested @ 6.0% p.a., tax-free, payable half-yearly)

Date	Interest	Operations Done	Expenses	Cost for Operation	Reserve	Net (Income – Expense)
Start	0	0	0	0	0	0
6 months +	5,400,000	25	2,500,000	1,875,000	625,000	2,900,000
12 months +	5,400,000	75	7,500,000	5,625,000	1,875,000	800,000
18 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	1,200,000
24 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	1,600,000
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36 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	2,400,000
42 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	2,800,000
48 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	3,200,000
54 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	3,600,000
60 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	4,000,000
		500		50,000,000	12,500,000	

* all figures are in Indian rupees

In 5 years, this process will help to fund five hundred heart operations while leaving the corpus capital intact, to be re-invested for a further five-year period to continue the project.

Introducing the Dr.Mani Children Heart Foundation

The Dr.Mani Children Heart Foundation is a not-for-profit charitable organization founded in August 2003 for the purpose of helping fund and sponsor life-saving heart surgery for children from poor families born with Congenital Heart Defects (CHD).

The Foundation was registered under section 12A(a) of the Indian Income Tax Act, 1961 and granted exemption from Income Tax under Section 80G for donations received by it from within India.

The Foundation also has received conditional approval under the Foreign Currency Regulatory Act to bring in donations from outside the country for use in its activities, and a little over \$34,000 have been received by the Foundation under this scheme.

Since its inception the Foundation has helped 11 children between the age of 3 months and 11 years receive critical, yet expensive treatment that they could not have otherwise received. Thankfully, despite the complex nature of some of these operations, all children have survived and are leading healthy, happy lives.

Donations solicited over the past 2 years have now been transferred into India after complying with all regulations, and will fund another 9 to 10 operations in the months to come.

Patients are selected for sponsorship by the Foundation primarily based upon the family's financial background. The average monthly family income of the beneficiaries has been Rs.2,200 - a figure clearly putting expensive heart surgery out of their reach.

Proposed Expansion

The initial pilot project has proven that it is practical and possible to fund even complex treatment for congenital heart defects at a reasonable cost if the procedures are performed under strict quality and cost control guidelines, by expert teams driven by a charitable purpose that puts a child's welfare ahead of pecuniary interests.

On average, each of the operations performed cost Rs.75,000 (approx. US \$1,700), which is lower than the conventional 'package rate' of Rs.125,000 charged by most cardiac surgical units for similar operations performed in their centers inside India.

To put this into perspective, a similar operation in a developed country would cost around US \$50,000 each - that's almost 20 times more expensive than the same operation performed in India.

It is a reasonable plan to carry out higher volumes of these operations at an average cost of Rs.75,000 (with an additional 'reserve' of Rs.25,000 withheld to cover any additional expense due to unexpected, yet unavoidable complications).

Our proposal, detailed below, will show how it is possible to carry out

- * One hundred heart operations every year on children with CHD
- * Do it again every year, for 5 years running
- * Using only a moderate sized corpus as seed capital
- * Without eating into the capital, which remains intact and available to be reinvested to keep the program going.

Congenital Heart Disease - A complex issue

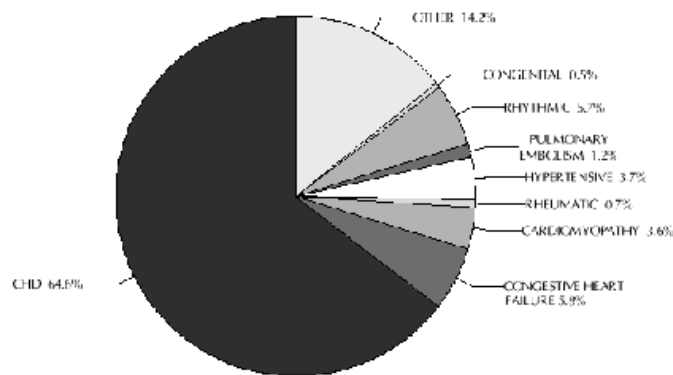
CONGENITAL HEART DISEASE a chilling phrase; a lethal constellation of birth defects of the heart that affect millions of newborn infants and children; a killer condition that claims thousands of lives every year.

7 in every 1,000 children are born with some kind of heart birth defect. Many of them will need life-saving treatment which is also expensive and not easily accessible. In India alone it is estimated that 300,000 children with CHD are born every year!

A fortunate few are cured by the miracles of modern day surgery. Sadly, the vast majority do not have access to treatment; they are forced to remain cardiac cripples. Severely limited physically, some of these unfortunate children live an extremely restricted lifestyle, made worse by the knowledge that their lifespan is cruelly curtailed by their disease.

Even in developed countries like the U.S., there were 3,939 deaths from CHD alone in 1995. The mortality rate is much higher in countries where this level of tertiary health care is either not available, accessible, or too expensive for most families to afford.

As if this weren't punishment enough, the older children are even painfully aware that their continuing lack of productivity makes them a heavy burden on their economically strained families and communities.



Total Deaths = 741,502 (100%), including 3,939 from congenital heart disease, ICD/9 codes 745-746.

Among heart diseases, Congenital Heart Disease (CHD) is unique for a number of reasons:

CHD IS A GROWING PROBLEM

Unlike other major diseases and healthcare dilemmas, CHD is NOT a problem that is going away. In a period when other kinds of heart disease are coming under control or even disappearing altogether, the incidence of CHD remains unchanged.

The pie (heart disease) is becoming smaller, but CHD is becoming a LARGER slice of it ! Because its cause remains unknown, there is no way to prevent CHD. If current trends continue, 20 years from today CHD might account for almost one in four cases of heart disease.

CHD IS A NEGLECTED PROBLEM

Most patients with CHD in India live and die untreated. Surgery for CHD accounts for less than 5% of heart operations performed world-wide, and the number is smaller in India. Dedicated centers for treating CHD are few and far between. Patients, denied access to a nearby facility, die untreated.

CHD IS A COSTLY PROBLEM

Most complex birth defects of the heart require multiple procedures for cure. Families of CHD victims are young. Parents are typically in their 20's or 30's. They're just beginning their careers, and their lives as independent adults - when disaster strikes. Financially insecure, emotionally strained to breaking point, these young families need support and guidance.

CHD IS A LONG TERM PROBLEM

If optimal treatment is provided, the CHD patient can look forward to living 50 to 80 years more! And while this makes it a very rewarding problem to tackle, it also means paying attention to longer term issues - delayed complications; employment and insurance; marriage and children; all are areas of concern.

CHD IS A SILENT PROBLEM

High cholesterol, bypass surgery, angioplasty and gene therapy are the glamorous issues, the media superstars of heart disease. Over 90% of the budget allocations of large organizations like the American Heart Association (AHA) and National Heart, Lung and Blood Institute (NHLBI) are diverted to adult heart disease research.

Consequently, funding for research into CHD is scarce. Neglected, unchallenged, indeed often undetected, CHD pervades communities affecting the rich and poor alike, in developed as well as backward countries.

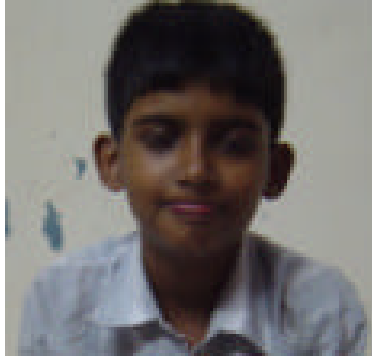
Details of Patients' Operations Sponsored by the Foundation

Below are details of the 11 patients who had operations funded by the Dr.Mani Children Heart Foundation:

Name	Age (yrs)	Date	Hospital	Diagnosis
Sagar	2	1.4.04	NH	Ventricular Septal Defect
Vinodh	8	14.10.03	NH	Tetralogy of Fallot
Prajula	3 m	8.9.04	NH	ALCAPA
Sreelakshmi	5	14.9.04	NH	Atrial Septal Defect
Sripriya	11	18.8.05	KJ	Atrial Septal Defect
Vinod Kumar	8	20.8.05	KJ	Atrial Septal Defect
Ramya	6	16.12.05	Sooriya	Ventricular Septal Defect
Thirumurugan	11	23.12.05	Sooriya	Ebstein's Anomaly
Aditi	11m	19.12.05	NH	Tetralogy of Fallot
Aditi Saha	3	17.12.05	NH	Ventricular Septal Defect
Sneha	6	16.1.06	Sooriya	Ventricular Septal Defect

THIRUMURUGAN

11 year old Thirumurugan has a heart birth defect that is a medical curiosity. Ebstein's anomaly is a complex collection of defects involving the right sided chambers of the heart and one of the heart valves. One of many 'blue babies', Thirumurugan's lungs could not get enough oxygen out to his body.

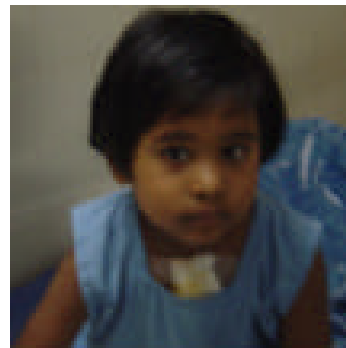


His father, a rickshaw puller from a small town in south India earns around Rs.1,500 per month - barely enough to support his small family. Heart surgery, however, was out of his budget.

After an operation, funded by the Dr.Mani Children Heart Foundation, he is now a healthy, active youngster, looking forward with eager anticipation to a normal life in adulthood.

RAMYA

Ramya goes to first grade in Salem, India. This cheerful, smiling 6 year old becomes a breathless, sweaty little girl when she runs and plays longer than a few minutes. The reason: A hole in her heart, called a Ventricular Septal Defect (VSD), drives twice as much blood through her little lungs than normal.



Coming from a middle-class family with a monthly income of just Rs.2,200, Ramya needed financial assistance to undergo curative surgery... support that was provided by the Dr.Mani Children Heart Foundation. She is now fully recovered from surgery and leads a healthy, happy life.

ADITI

Little Aditi has had a troubled first year of life. A blue baby born with 4 heart defects (called 'Tetralogy of Fallot'), she is a fighter - and a survivor.



Her family travelled from far to seek medical attention at the Narayana Hrudayalaya Institute in Bangalore, (one of our partner hospitals) because of the institute's reputation as a top notch healthcare unit, as well as one doing a lot of charitable work.

The Dr.Mani Children Heart Foundation was honored to sponsor open heart surgery for this deserving little baby in December 2005... and Aditi made a speedy recovery, and is on course to lead a normal life, thanks to the timely operation made possible by our generous donors.

SRIPRIYA

11 year old Sripriya has many reasons to be sad - but she's a vivacious youngster with a scintillating smile. Orphaned at birth, adopted by 'Udavum Karangal', a child care and relief organization, Sripriya was diagnosed with a hole in her heart - an Atrial Septal Defect (ASD) - causing increased blood flow into her lungs.



In an open heart operation sponsored by the Dr.Mani Children Heart Foundation, her defect was repaired successfully. She is now back in school, a 'normal' student.

ADITI SAHA

Desperately seeking treatment for their 3 year old child, born with a hole in the heart (a Ventricular Septal Defect or VSD), Aditi Saha's parents (farmers in a tiny village in North India) pooled their meager resources and travelled to Bangalore. A daily wage earner, with a monthly income of only Rs.1,800 her father had little other choice.



Fortunately her operation to close Aditi's VSD was a complete success, and was fully funded by the Dr.Mani Children Heart Foundation. She is back home in her village, playing with friends happily, secure in the knowledge her heart has been fixed. One more victory for the Foundation in its relentless struggle against a killer condition.

VINOD KUMAR

Vinod is 8 years old. His father is a construction worker, earning Rs.1,300 a month. When he first heard about the astronomical cost of open heart surgery, he all but lost hope that his son will be treated.



But unwilling to give up, he approached many hospitals for help - and found the Dr.Mani Children Heart Foundation. Vinod has had his operation in August 2005 and is now completely cured of his problem - an Atrial Septal Defect (ASD). His father is happy. We at the Foundation are happy too.

PRAJULA & SREELAKSHMI

The young man and his wife came from a rural background in a tiny village in Kerala to the bustling environment of Bangalore city. They brought their 2 little daughters - 11 month old Prajula and 5 year old Sreelakshmi. Both had heart birth defects.

Through the dynamic initiative of Ms.Lakshmi Mani, co-ordinator of the charitable wing of Narayana Hrudayalaya Institute, the younger child's operation was scheduled immediately - funded by the Dr.Mani Children Heart Foundation.



She had a very rare form of coronary artery problem called ALCAPA syndrome. The risk of surgery was very high. But thankfully, Prajula survived the ordeal. She's now a thriving young infant - and keeps her mother busy!

Soon after Prajula's operation, her sister Sreelakshmi also had a repair of her Atrial Septal Defect done... again funded by the Dr.Mani Children Heart Foundation. She wrote a nice letter thanking us a few weeks later, and is now going to school happily.

SAGAR

Baby Sagar is just over a year old. But to his worried parents, it seemed like much longer.



Ever since he was born with a Ventricular Septal Defect, Sagar had been in and out of hospital with frequent severe chest infections. Medicines brought them under control - but they kept recurring often.

Doctors advised surgery. But there was a problem. The operation cost Rs.67,500 - and the family income was only Rs.500 a month!

Things looked pretty bleak - but no one had factored the power of a "Chain of Love"

which would stretch across the world, reaching out with a lifeline to save the little boy.

With the contributions of generous donors who supported the Dr.Mani Children Heart Foundation, Sagar's operation could be funded. With his defect successfully repaired, the little boy is now a bundle of joy to his family again.

"We almost lost him. Now we treasure him a lot more for it" says his delighted mother.

VINODH

8 year old Vinodh was interviewed on NDTV, a national cable TV channel. When asked what he was going to do now that he had his heart operation, the little boy said: "I'm going to take good care of my mom."



Abandoned by her husband when her son was a toddler, Vinodh's mother managed to get by as a daily-wage construction worker. Her meager income of Rs.500 a month barely managed to feed her two children. Heart surgery for her son would cost a mind-boggling Rs.65,000.



So Vinodh's heart, burdened by a complex set of defects called Tetralogy of Fallot, struggled on. Until he received a heart operation when donors to the Dr.Mani Children's Heart Foundation pitched in to contribute the funds for Vinodh's surgery.

The grin of joy on the little boy's face matched the tired smile of relief on his mother's!

My background and role in this project

I am a pediatric cardiac surgeon, and for 8 years have been exclusively involved in treating children with birth defects of the heart. Our unit at the Institute of Child Health & Hospital for Children in Chennai, India, is one of Asia's largest paediatric institutions, We operate on around 350 children with CHD every year, and provide out-patient care to another 800 cases.

As Assistant Professor in Cardiac Surgery, my role in caring for these patients extends from the diagnosis of their condition, treatment planning, carrying out the surgical procedure, post-operative care and long-term follow up.

I chose to specialize in congenital heart surgery because it presents a fascinating spectrum of defects which are a challenge to correct. But a closer and deeper understanding of the unique social circumstances governing delivery of specialized care to this group of patients has been a strong stimulus in taking the initiative to start this project.

What started initially as an experiment in creating a funding system to sponsor a few heart operations for children from poor families has taken me along this exciting path, and grown into something with far greater potential.

The steps taken until now have been personally instructive, educational and interesting. There were many things I didn't know about planning and creating such an organization and outlining this project. Slowly, painstakingly, I devised the plan detailed above - and hope, steadily, to bring it to fruition.

Resources Available To The Foundation

FULLY EQUIPPED SURGICAL UNITS:

The operations funded by Dr.Mani Children Heart Foundation have been carried out at 3 hospitals, two in Chennai and one in Bangalore.

All are state-of-art medical institutions, fully equipped with all necessary facilities (like heart-and-lung machines, ventilators, cardiac monitors and other life-saving equipment) to safely carry out complex heart surgery.

K.J.Hospital, Chennai. K.J. Hospital is a premier institution, founded in the mid-1970s and boasting of several firsts in the city's sparkling medical history, such as the first CT scanner.

An institution capable of handling advanced medical speciality care, K.J.Hospital has an

active renal transplant program, an advanced trauma care facility and multiple medical specialities manned by a panel of expert practitioners.

Sited on a prime location on a national highway in the heart of the city, it is easily accessible and all other facilities are in close proximity.

Sooriya Hospital, Chennai. Sooriya Hospital is one of the fast growing new mid-size hospitals, with an emphasis on quality and high-tech health care at affordable cost.

A multi-disciplinary 150-bed hospital (which is being currently expanded to include another 100 beds), Sooriya hospital is equipped with all infrastructure necessary to tackle the most complex medical problems.

The cardiac surgical unit is developing very rapidly and gaining name and recognition for the excellent results delivered. There is an adult cardiac program which runs in concert with our pediatric program, complementing and supporting it in all respects.

Narayana Hrudayalaya, Bangalore. One of the stars in the health care firmament in Bangalore is the Narayana Hrudayalaya Institute of Medical Sciences. The brainchild of visionary cardiac surgeon, Dr. Devi Prasad Shetty, the institute performed well over 3,500 heart operations in 2005 and has done over 10,000 major heart operations in the first 5 years of its existence.

An advanced medical center equipped to handle the most complex heart related problems, it boasts an excellent team of medical and para-medical personnel dedicated to delivering high quality care to patients.

With a strong charitable element to its work, the Hrudayalaya is fast becoming the resource most families affected by CHD (and unable to afford the cost) are turning to as a solution to their problem.

The hospital presently gets patient referrals not only from India, but also from 17 different countries in the South Asia region.

QUALIFIED EXPERT TEAMS:

Our team of highly skilled and fully qualified professionals include surgeons, anaesthesiologists, intensive care experts, cardiologists, nurses, perfusion technologists and many other specialists, all experienced in caring for children before, during and after complicated heart operations.

The team of surgeons is headed by **Dr. Sivasubramanian**, Assistant Professor in pediatric cardiothoracic surgery at one of Asia's largest children's hospitals, the Institute of Child Health in Chennai, India.

He has received Masters degrees in general and cardiovascular surgery and followed this by 2 years of advanced specialist training from top institutions in the world including the Great Ormond Street Hospital for Sick Children, London, United Kingdom, and the Royal Childrens Hospital, Melbourne, Australia.

His cumulative experience includes participation in over 1,000 cardiac surgical procedures for congenital heart disease.

Dr.R.Rajendran is a highly skilled expert anaesthesiologist with over 16 years of experience in cardiac anaesthesia. He is also the Head, Department of Anaesthesiology, at a leading Women and Children's hospital in Chennai.

Dr.Rajendran is the leader of our team of anaesthesiologists who are involved in managing patients during the operation and in charge of their post-operative care in the Intensive Care Unit in partnership with our critical care expert team.

The team of perfusion technologists is headed by **Mr.Jagannathan**, a very experienced perfusionist who heads the unit of cardiovascular perfusion at the Institute of Child Health.

With over 4,500 operations to his credit over a career spanning nearly 20 years, he brings to the team a wealth of experience and knowledge handling the complex issues of heart-lung machine operation and managing the constantly changing physiological state throughout the course of a heart operation.

The team of critical care nurses is headed by **Ms.Sumathi**, an extremely experienced ICU nurse with over 9 years of experience in cardiac post-operative critical care and as nurse administrator of a cardiac unit. All other nurses in the team also have an average of no less than 5 years of pediatric cardiac critical care experience, and are responsible to a great extent to the successful outcome following surgery.

Summary

In the final analysis, this project will be considered a success if patients with CHD can

- * find expert medical treatment accessible and affordable
- * be sure of receiving surgery regardless of their ability to pay the costs
- * continue to receive care in the long term, in case required
- * positively face issues of employment, marriage, family and insurance
- * look buoyantly towards a bright future and the delightful possibility of a world without CHD

As a practicing physician, I regularly see hundreds of different kinds of diseases, am painfully aware of their impact on human lives. Each in its own way cries out for resources, for attention, for a high place on the public's over-stressed caring agenda. Yet among all these candidates for your assistance and concern, I have singled out one - **Congenital Heart Disease (CHD)** - as the one that should top the list.

My reasons for believing this so intensely are hopefully clear from the above. What my words cannot convey, however, is what I now ask you to hear most: the unspoken, inarticulate plea of these very young, very unfortunate children for a chance to become productive, fulfilled, contributing members of their families and communities.

With your help and thoughtful support, we can begin to reduce this one widespread misery immediately and significantly.

Thank you for considering my proposal.

Sincerely

Dr.Sivasubramanian, M.S., M.Ch.
Consultant Pediatric Cardiac Surgeon

Chairman,
The Dr.Mani Children Heart Foundation

ANNEXURE – 1

CORPUS: Rs.180,000,000 (approx. US \$4,000,000)
(Invested @ 6.0% p.a., tax-free, payable half-yearly)

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48 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	3,200,000
54 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	3,600,000
60 months +	5,400,000	50	5,000,000	3,750,000	1,250,000	4,000,000
		500		50,000,000	12,500,000	

* all figures are in Indian rupees

COST OF COMPLICATIONS

At Rs.400,000 (approx. US \$9,000) per patient with complication

Date	No.of Compl-ications	Cost	Reserve	No.of Compl-ications	Cost	Reserve	No.of Compl-ications	Cost	Reserve
	@ 2%			@ 4%			@ 6%		
Start	0	0	0	0	0	0	0	0	0
12 months +	2	800,000	1,700,000	4	1,600,000	900,000	6	2,400,000	100,000
24 months +	4	1,600,000	3,400,000	8	3,200,000	1,800,000	12	4,800,000	200,000
36 months +	6	2,400,000	5,100,000	12	4,800,000	2,700,000	18	7,200,000	300,000
48 months +	8	3,200,000	6,800,000	16	6,400,000	3,600,000	24	9,600,000	400,000
60 months +	10	4,000,000	8,500,000	20	8,000,000	4,500,000	30	12,000,000	500,000

* all figures are in Indian rupees