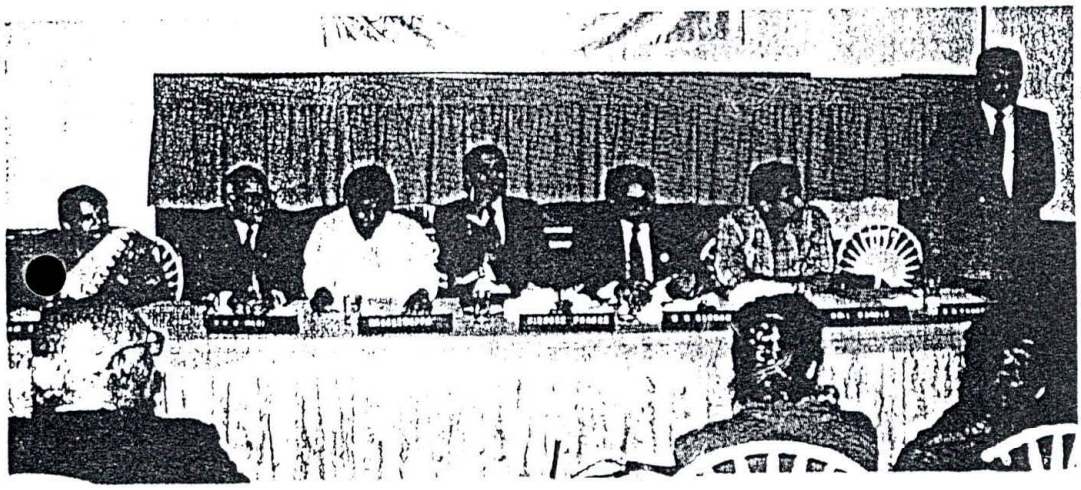
HEALTH

RESUSCITATING RECIPIENTS

A non-government organisation gives the cadaver transplant programme a new lease of life



THE Human Organ and Tissue Transplant Act of 1994 was a non-starter in Karnataka, till May, when a group of individuals decided to act.

Although the transplant act was adopted by the Karnataka government in early 1995, medical specialists who wanted to initiate the cadaver transplant programme (CTP) could not. Reason: the government was taking its time to notify the hospitals where the transplant could be done. It had also not set up a panel of neurophysicians and neurosurgeons to certify 'brain-death' in patients who suffer irreversible brain stem damage.

Even as the government took its time the plight of the victims, whose only chance of survival was an organ transplant, worsened. That is when a group of individuals stepped in to help the doctors help patients, especially those who did not have relatives to donate organs. In September 1996 they set up the Foundation for Organ Retrieval and Transplant Education (FORTE).

Noble gesture: Cricketer Anil Kumble who has pledged to donate his organs

They started by helping those patients whose organs were either failing or had already been rendered useless. "Through FORTE we wanted to help victims of End Stage Renal Disease (ESRD) who had no related donors," said Capt. V.V.K. Mani, one of the trustees of the organisation. "We also wanted to make things move faster and facilitate the faster implementation of the transplant act. (The act shifted the definition of death from cardiac arrest to brain-stem function's arrest).

FORTE played a major role in pushing the government to implement the act. In May the government allowed 12 hospitals—seven in Bangalore—to conduct cadaver transplant operations. It also empanelled 54 neurosurgeons and neurophysicians who could examine and assess whether 'brain-stem' death had occurred.

Today, FORTE is functioning as a facilitatory body, helping transplant teams conduct CTP. It organises workshops on becoming better 'donor-motivators' for social workers. "We train two social workers from each recognised institution," says Rebecca Thomas, FORTE's coordinator. The donor motivators are supposed to interact and counsel the potential donor's relatives. "Our aim is to create awareness and motivate people to come forward and donate their relative's organs instead of letting them get buried or burnt.

FORTE plans to maintain a database of recipients who are asked to deposit Rs 25,000 in an escrow account. Once FORTE locates a donor, this amount will be spent on the donor.

The moment consent is obtained from the relatives of the donor, the money will be used for a series of blood and tissue investigations and donor shifting charges—in case the donor is lying in a 'non-recognised' hospital.

Recipients do have a choice. If they want to withdraw their name before the organ becomes available, the amount will be refunded with interest.

In another major step FORTE has convinced all 'recognised hospitals' to maintain uniform donor maintenance and organ retrieval charges which will go a long way in reducing the financial burden on the recipients.

The organisation's efforts have made a major difference in the lives of many End Stage Renal Disease patients. Earlier, in the absence of a related donor, dialysis was the only option for them.

You can contact FORTE at SF-7 Business Point, 137 Brigade Road, Bangalore
Tel: 2237045.

VEENA BHARATHI

Times of India Bangalore
20-12-1996

Doctors sure of people's backing for cadaver transplants

Meera John Chakraberty

BANGALORE: After a two-year battle against a cirrhotic liver condition, Rajesh died at the tender age of 12. Doctors at the St John's Hospital in Bangalore were able to give him temporary relief surgically. There was nothing more they could do for him. Except a liver transplant, which would have him bounce back to normal, healthy life.

St John's has been certified "fit and fully equipped to perform liver/kidney transplants" by the government. Dr Ashley J. D'Crews, head of paediatric surgery at St John's, was confident he could pull off the operation successfully. But there was a nagging problem: the law does not permit cadaver organ transplants in Karnataka. So nobody could budge an inch forward.

While several other states have implemented the central Human Organs Transplant Act, 1994, in toto and are performing cadaver organ transplants, the Karnataka government's mule-headedness in this matter is baffling doctors. A suspicion is that an influential lobby with vested interests (organs sale) is colluding with politicians to stonewall the process. While the stalemate continues at the higher levels, innocent victims are paying with their lives for government apathy.

"Rajesh was an ideal case for a liver transplant," recalls Dr D'Crews. "I spoke to his mother about donating her left lobe. She was willing if we could give her an assurance that nothing would happen to her." That was difficult, says Dr D'Crews, because chances of the mother developing complications later were tangible (2.5 per cent risk). In such cases, cadaver organ transplants are advocated.

Dr Philip Thomas, professor of surgery at St John's, who is trained for liver transplants at the world's premier organs transplant institute in Pittsburgh, USA, explains that fathers, mothers or siblings as donors give the best results — a guaranteed life of 17 years for the transplanted kidneys in 50 per cent of the cases. Organs transplanted from unrelated living donors or cadaver transplants may last for only eight years.

The advantage is that cadaveric organs are an ever-renewing source of organ availability, given the public readiness to pledge organs for transplants after death. Doctors have no fears about public backing. "The overwhelming response to eye donations is an indicator," points out Dr Philip Thomas.

However patience is running thin with a band of committed doctors who face a growing number of patients everyday with chronic kidney and liver problems, but have no answers to offer them. Says Dr Lloyd Vincent, assistant professor, nephrology, at St John's: "Every week I get a minimum of three patients with End Stage Renal Disease (ESRD), with no donors or the resources for dialysis. I have done just six transplants this whole year. If cadaveric organs were available I could have performed atleast 150 transplants this year."

There are an estimated 80,000 to 1 lakh patients with chronic renal failure in India every year. Of them, while less than 10% can avail of dialysis, a meagre 5% are able to get transplants done. The rest simply suffer and die sooner than later.

"I treat a lot of urological problems in children," says Dr D'Crews. "In effect, I am building up a large number of patients who will survive childhood, but will come back in their adolescent years for transplants. Cadaver transplants are the only hope for this segment of patients."

Again, there are a number of hereditary kidney diseases, like hereditary nephritis or polycystic kidneys, where a related donor is ruled out and the chances of recurrence in grafted kidneys are high, explains Dr K.V. Srinivas, nephrologist, Bangalore Kidney Foundation.

"In such cases, if cadaveric sources are available, it doesn't matter how many times problems recur — you can keep transplanting without knocking out the organs of family members".

FORTE will do the liaisoning

All cadavers cannot be donors and only a handful of hospitals will be allowed to harvest organs from cadavers. An independent and unattached panel comprising neurophysicians and neurosurgeons must certify a patient "brain dead" (when a person is breathing on a ventilator and there is no coming back) before harvesting can begin. There is a scientific process for pronouncing a person brain death.

Poison cases, old age, septicaemia and malignancy deaths, lacerated or infected organs don't qualify for cadaver transplants.

Foundation for Organ Retrieval and Transplant Education (FORTE) is an autonomous body of people from all walks of life in Bangalore, with medical persons playing only an advisory panel. Apart from creating an awareness about cadaver transplants, the body will have a computerised data bank on the availability of cadaveric organs statewide, even inter-state. The moment the availability of a cadaveric organ is flashed on the screen, transplant coordinators crack down, computer matching the available kidney or liver with patients on the waiting list also fed into the system. Organs are disbursed depending on the seriousness of the case in waiting.

Kidney transplant rackets still flourish

Thanks to the loopholes in 'near-relative donor' scheme

Swati Das

BANGALORE: Kidney transplant rackets continue to flourish. The latest such racket uses the loopholes in the 'near-relative donor' scheme. You just have to visit some of the hospitals in Bangalore authorised to do kidney transplant for a donor and you get one soon, no matter what your blood group is.

This lucrative business has patients believe that a transplant is an emergency, and not a substitute, for dialysis, as doctors say.

Can the exploitation of the poor donors and the rich recipients by the agents dealing with kidney be stopped? Perhaps not until the loopholes in the procedure of examination by the Authorisation Committee for Transplantation of Human Organs set up in 1995 are plugged. Nor till the cadaver transplant is openly allowed in all hospitals.

For one under the transplant rule the committee does not have the provision to investigate beyond the applications submitted by the donor-recipient combine and the relationship is verified based on the form.

When questioned about the possibility of applicants being tutored by agents how to face the interrogation, committee chairman and Parliamentary Affairs secretary M.R. Hegde told *The Sunday Times of India*, "We call the donor and the recipient separately and in case of suspicion, we also interrogate their witnesses separately. We can go only by the records and reject suspicious cases. We have no control over what is happening outside. The rule has no provision for police investigation."

After the committee rejects an application, the applicants have the provision to appeal to the Health Minister. According to a reliable source the minister reverted five such cases back to the committee.

In 1996, the committee had received about 100 applications, while this year the tally is nearing 50. Most of the applications came from Manipal hospital, CSI Hospital, M.S. Ramaiah Hospital, Lakeside Hospital and Bangalore Hospital where transplants from unrelated donors are accepted. The interrogation is a weekly affair, held every Saturday. In case of holidays it is either shifted to preceding Friday or following Monday.

Under the transplant rule kidney transplant can only be done through near relative -spouse, son, daughter, father, mother, brother and sister. Anybody outside of these relationships is considered an unrelated-donor. Yet the question that hangs is how does one verify these relationships?

In case of unrelated donor the patients have to go through the committee. Under this category the committee has to verify the intensity of affection or attachment for the recipient or any other special reasons. The special reasons include period of acquaintance and degree of association and donor's relation with recipient in terms of reciprocacity of feelings and gratitude.

"The only way one can relieve this situation is by legalising cadaver transplant. In that case we can save two persons with one person's kidney," said Mr Hegde.

Apart from Mr Hegde, there are five doctors (including the director of health and family welfare department), and the deputy secretary to the chief minister in the committee. The post of member-secretary, represented by the undersecretary in the health department is presently vacant.

• Faceless agent has donors ready for asking, page 3

'Faceless' agent has donors ready for asking

KIDNEY TRANSPLANT

BANGALORE: Following a lead, a correspondent from *STOI*, impersonating as a kidney failure patient's relative, had approached a reputed hospital off Queen's Road. A warden directed the visitor to the family of an 18-year-old girl who had undergone a transplant three days ago for advice on how to acquire a kidney.

The father of the girl promised to get in touch with the agents. He would leave with them the blood group required as well as the correspondent's contact number. He said he had paid them Rs 70,000 for a kidney and Rs 1 lakh to the doctor for the transplant. "You will have to pay anywhere between Rs 65,000 and Rs 1 lakh depending on the age and blood group of the recipient," he said.

This correspondent was warned against going into the donor's room. He was sleeping in the next room. "We are not supposed to talk to him. He is from Tamil Nadu but presently residing with some relative in Bangalore. We do not know how much he is being paid," said another relative of the girl.

Four days later, an agent, identifying himself as Mohamed Yusuf, called up at the contact number saying that he had found a donor and insisted on meeting the 'party' at her house. However, a meeting was fixed at the same hospital.

Waiting for the agent, who had gone to bring the 24-year-old kidney donor, this correspondent quizzed the girl's parents on the procedures to be followed. They said Mohammed Yusuf would take an advance of Rs 5,000 and keep demanding more. "Do not give the entire money until the whole transplant is over. If not, you might end up paying more," warned the father.

Mohamed Yusuf, wearing dark glasses, insists on the money being paid only to him. After matching the blood group and doing other tests, the donor has to give in a joint application with the patient (along with photographs) to the Authorisation Committee. Mohammed Yusuf then sits with the donor and the recipient to "tutor" them on how to tackle the committee's queries. "Nowadays the committee's scrutiny is not strict enough. They do not go by the rulebook and don't bother to check whether the donor and recipient are related," said the girl's mother.

Mohammed Yusuf did not turn up. But his associate did, along with a donor from Dharmapuri in Tamil Nadu.

On the pretext of not being sure if the transplant would be taking place in Bangalore, this correspondent was able to get a PP number of Mohammed Yusuf. The number was registered in the name of Noor Ahmed Pasha on 13, M. Majid Road in J.C. Nagar. When the number was called, someone at the other end said Mohammed Yusuf did not stay there, but visited an electrical shop on that road. Any message would be communicated to him.

Surely, Mohammed Yusuf is not the only agent selling kidneys, violating all norms and hoodwinking the government scrutiny panel. There are many more smooth operators like him in the city who are going scot-free.

-S.D.

Even in her death, she saved lives

In February this year, Usha Gowri became the first cadaver kidney donor in Karnataka under the Human Organ and Tissue Transplant Act. VEENA BHARATHI writes about the young, extraordinary girl and her tragic death

USHA Gowri, an MBBS student, was barely 22 when she died in a road accident in Bangalore. But even after her death, this bright student of the Government Medical College in Mysore brought a new lease of life to two persons suffering kidney failure. The young girl became the first cadaver kidney donor in Karnataka, after the Human Organ and Tissue Transplant Act was passed in 1995.

"We were four members in our family, now we are only three," said Seetharam, the father of Usha, on the occasion of the anniversary of FORTE (Foundation for Organ Retrieval and Transplant Education), which honoured the families of cadaver donors. After he received a memento from Governor Khurshed Alam Khan, Seetharam tearfully recalled his daughter's life and her tragic end.

Born on December 31, 1976, in a small village near Thirthahalli in Shimoga District, Usha was a topper in her class and used to swim fearlessly in the Tunga river when she was barely eight years old. "When Usha was four years old, she used to climb the Kodachadri hill with me," recalled Seetharam. When she was in the Seventh Standard, Usha had the honour of presiding over the Akhila Karnataka Makkala Sammelana held at Shimoga. Later on, when she joined the Kasturba National Girls' High School, her academic and extra-curricular activities always placed her ahead of many other students. In a letter which she wrote to her maternal aunt Lalitha, (who is a volunteer at Vivekananda Kendra, Kanyakumari), Usha had stated that in the 35 inter-school competitions that she had participated in an academic year, she had stood first in 33 events! Says mother Nethravathi Seetharam, "An in-born quality in my daughter was her tolerant and affectionate attitude. She had tremendous patience to explain many scientific things, of which I am ignorant, in a simple manner! We were at Mysore to celebrate her 21st birthday on December 31, 1997, which was destined to become her last birthday. 'I will have to get two or three gold medals in my final exams,' Usha told me before we started back to Shimoga. That academic ambition of hers, however, remained unfulfilled."

Usha Gowri

Her friend Divya, who was her junior in the Mysore Medical College and knew her since school, reminisces: "Her leadership qualities and multiple interests were a role model for all of us. She became a guide to me when I joined the first MBBS. In our ladies' hostel, we would seek her advice on so many things. When I reached my hostel after a month-long holiday, I was terribly shaken on hearing the unbelievable news that Usha was on her death bed."

On January 25 this year, Usha, who had come to Bangalore to buy a few medical books, had stayed at her cousin's place. The next day, on her way to the railway station, Usha was riding pillion on the bike of her cousin. A sudden brake to avoid a head-on collision with another vehicle resulted in Usha's fall. The girl sustained extensive head injuries. She was admitted to NIMHANS in an unconscious state. She had to be kept on a ventilator, along with other critical care measures.

Usha was declared brain-dead when she showed no signs of improvement, despite the best of critical-care treatment. Her father Seetharam was not willing to accept the futility of the situation. "I instantly felt that Usha would have coerced me to donate her kidneys to the young and the needy had she been able to communicate. Usha, who was an optimist to the core, would have advised me to realise the positive side of our irreversible personal tragedy. Thus, even in a heart-wrenching situation, I could discuss the probability of 'organ donation' with the concerned specialists," he said.

On February 3, 1998, Usha's mind and body gave up fighting for her survival. When Seetharam saw his daughter at 8 a.m., doctors were struggling to record her BP. With her body temperature having gone down to 13 C, most of the veins in her body had collapsed, the vital I/V fluid was struggling to find its way at a rate of at least a drop a minute. Though stricken by the ultimate truth that his daughter was saying an eternal 'good bye', Seetharam requested Dr Thimmappa Hegde of NIMHANS to retrieve Usha's kidneys for the benefit of two other individuals. Then, he was told that NIMHANS had the provision to extract only corneas, and that for other organ retrieval, Usha had to be required to be shifted to any of the 'donor-recognised hospitals'.

Dr Vineeth Nair, who is in charge of critical care at the Manipal Hospital in Bangalore, tried all the essential resuscitative measures to revive Usha, after she got shifted to the hospital. Dr Vineeth Nair's efforts for ten continuous hours went in vain. Usha was declared brain-dead by a team of neurophysicians at 11.30 p.m. After her father signed the consent form, both her kidneys were retrieved while the cadaver was still on a ventilator, thus maintaining the viability of the organs. And around 2.30 a.m., one of the cadaver kidneys thus extracted was transplanted to an end-stage renal disease (ESRD) patient at the Manipal Hospital and one more kidney was sent to St John's Medical College and Hospital, where one more successful kidney transplant was carried out. Rebecca Thomas, Co-ordinator of FORTE, helped Usha's father in the post-mortem formalities.

As a gesture of acknowledgement of Usha's undaunted spirit and her family's sacrifice in providing the gift of life to two other persons, Dr Sudarshan Ballal, Director of Nephrology Unit, Manipal Hospital, Bangalore, has declared a day in a month as 'Usha's Day'. On that day every month, a kidney transplant is carried out at the Manipal Hospital at a subsidised cost (without any professional fees). The practice began in March 1998.

Cricketer Anil Kumble, who has signed the cadaver donor card

Cadaver kidney transplant saves housewife

BANGALORE, April 9 (DHNS)

Thirty-two year old Susheela (not her real name), a mother of two children, must be thanking providence and of course the donor family who gave her a new lease of life. Susheela was suffering from kidney failure and needed a transplant.

On Friday afternoon, a 48-year old KEB employee who had suffered massive head injuries was rushed to St John's Hospital where efforts to save him failed. He was declared 'brain dead' on Saturday. His family was keen on donating one of the kidneys.

Meanwhile Forte, (Foundation for Organ Retreival and Transplant Education) which keeps a waiting list of patients who need organs, in all hospitals in Bangalore, alerted the doctors of two emergency cases, which matched the blood group of the deceased. After medico-legal procedures, the donor's kidney was removed at the hospital after which the body was sent for post mortem. On April 5, the transplant was successfully performed on Susheela who is fast recovering.

Third successful cadaver transplant

Health Correspondent

BANGALORE: The third cadaver transplant in the state was successfully performed on Sunday at St John's hospital here.

The donor was a 48-year-old KEB employee who had been rushed to the hospital after suffering serious head injuries on Friday last week. He was declared 'brain dead' on Saturday.

Though initially reluctant to allow the transplant, senior KEB officials and the staff of St. John's convinced the grieving family to give the go-ahead for the noble act and help save another life.

Following permission from the family, the Foundation for Organ Retrieval and Transplant Education (FORTE), which maintains a waiting list of all patients awaiting a transplant, was contacted. Working through the night a patient with a suitable match for the donated organ was found at 4 am.

The donor's kidney was removed at the hospital in a surgical procedure after which the body had to be sent for post mortem.

The recipient was a 32-year-old mother of two children. She was brought into the hospital and the kidney was successfully transplanted into her.

Today she lives a new, and healthier life, thanks to the good deed of the KEB employee and his family.

Making organ donations easy

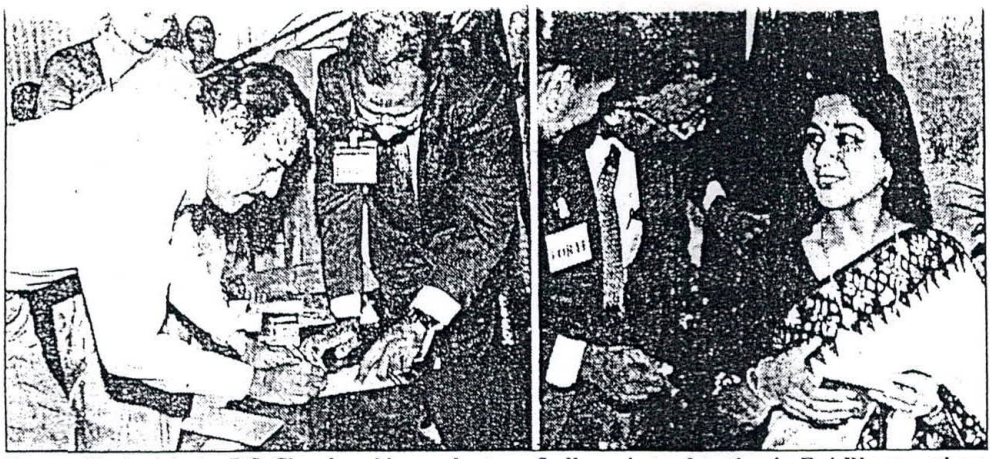
AN illegal trade in human organs can be nipped in the bud if there is cooperation from the people," said Rebecca Thomas, honorary secretary of Foundation for Organ Retrieval Transplant and Education (FORTE), a coordinating agency for organ transplant in Bangalore.

"There are a lot of cases where the person is brain dead but his or her vital organs like heart, liver and kidneys can be used for transplantation. But co-ordination between the donor and the recipient need to be arranged," Rebecca added. A window period of six to 12 hours after a person is brain dead is sufficient to carry on the transplantation. Doctors say that if the organs of 50 per cent of accident victims are retrieved, it is sufficient to meet the demand.

FORTE came into being two years ago, after the government passed the Organ Transplant Bill in 1995. FORTE acts as a coordinating agency between the donor and the recipient and has successfully undertaken eight cadaver kidney transplants in Bangalore. Its functions include evaluating potential donors, assisting with donor maintenance, arranging for speedy post-mortem and police permission, distribution of organs and tissues and providing educational programmes.

FORTE wants to venture into retrieval and transplant of heart, liver, pancreas, intestines and lungs. "It is like donating eyes. Anybody can become a donor and register with us. The person has to sign a form granting his willingness to use his organs after his death," said Rebecca. Donor cards are available free and any healthy person can become a donor. The recipient needs to fill an application form and clear all legal formalities. Rs 25,000 is taken to arrange for all medical tests during the transplant.

Members of FORTE include Dr Kishore Phadake, nephrologist in Manipal Hospital, Dr Elizabeth Zachariah, Capt Mani, Dr Latha Jagannathan, Mr K.N. Prabhashankar. For details contact FORTE office, SF-7, Business Point, 137, Brigade Road, Bangalore 560025. Phone: 2237045.



Former Test cricketer B.S. Chandrasekhar and actress Sudharani at a function in Raj Bhavan, where they signed donor cards for kidney transplants on Friday.

Celebrities pledge their kidneys

Staff Reporter

BANGALORE: Kannada film-stars Srinath and Sudharani, danseuse Vani Ganapathy, former test cricketer B.S. Chandrasekhar and editor of *Frontline* magazine N. Ram were among those who signed donor cards for kidney trar nts on the occasion of the Foundation for Organ Retrieval and Transplant Education's (FORTE's) second anniversary on Friday.

Among others who signed the donor cards were well known eye surgeon Dr M.C. Modi, painter S.G. Vasudev, educationist Dr Ramdas Pai, film artist Ashok Rao and advertising professional S.M. Nair.

At a function held at Raj Bhavan, the families of cadaver organ donors in the state were honoured by Governor Khurshed Alam Khan. Among them was the father of 22-year-old Usha Gauri, a medical student who died in a road accident in February this year. She became the first cadaver donor of kidneys in the state.

The five other cadaver donors of kidneys so far in the state have been former Professor of Urology in Bangalore Medical College Dr A.K. Annamalai, KEB employee Veerabhadraiah, a housewife Saroja, 10-year-old R.K. Prasad and 16-year-old student Shivaprasad.

TIMES OF INDIA

Cadaver donors wi be honoured

FORTE, Foundation for Organ Retrieval and Transplant Education, will honour cadaver organ donors at the Raj Bhavan on Friday. Governor Khurshed Alam Khan will be the chief guest. N. Ram, journalist, S.G. Vasudev, artist, Vani Ganapathy, danseuse, Ashwini Nachappa, athlete, B.S. Chandrashekar, cricketer, Sudha Rani, film artist, S.M. Nair, advertising executive and Srinath of the small screen will participate.

Cadaver organ donors' families' felicitated

DH News Service

BANGALORE, Sept 4

"May your tribe increase" was the constant refrain at a function in which six families who donated the organs of their dear ones inspite of their own personal tragedy were honoured by Governor Khurshed Alam Khan in the City today.

The programme was organised by the Foundation for Organ Retrieval and Transplant Education (FORTE), a non-profit organisation which has been striving for the last two years to make the gift of life possible.

Families of Usha Gowri (22), a medical student who died in a road accident, Dr A K Annamalai, a renowned urologist, who had an untimely death, Veerabhadraiah, a KEB officer who died while on duty, Saroja a house wife who had a sudden death, Prasad (10) who was fatally injured while playing and Shivaprasad (16) who died in a road accident were honoured.

The occasion was also marked by the signing of donor cards by eminent personalities like N Ram (journalist), Vasudev (artiste), Vani Ganapathi (danseuse), Chandrashekar (cricketer), Sudha Rani (Kannada actress), Srinath (actor), Dr M C Modi (eye surgeon), Dr Ramadas Pai (educationist) and many others.

Governor Khurshed Alam Khan honouring cadaver organ donor, father of 22-year-old Usha Gowri, a medical student who died in an accident, at a function organised by FORTE at the Raj Bhavan on Friday. Dr S Kanta, Vice-chancellor, Rajiv Gandhi University of Health Science, is also seen.

DH photo

The Governor in his address lauding the families and the service rendered by FORTE said that this must take the shape of a peoples' movement which would involve a large number of donors.

Mr N Ram, pointing out the loopholes in the legal system said that there is 'brisk commerce' in the kidney transplantation within the state and across states.

Dr S Kanta, vice-chancellor Rajiv Gandhi University of Health Sciences was also present on the occasion.

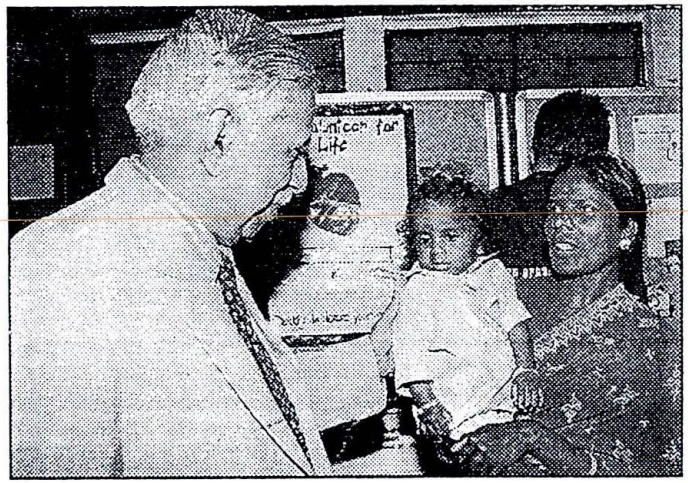
Honoured for their noble act of saving unknown lives

DH News Service

BANGALORE, Nov 10

"I have received many gifts in my life, but the most unexpected and noblest came at the most unexpected time — on my death bed. I pray for them more than I do it for myself." With these words, Shailaja, recipient of a cadaver kidney, summed it all at a function organised here to felicitate the family members of the cadaver organ donors.

Family members of five donors of cadaver organs (vital organs harvested from brain-dead persons for transplant in needy patients) were honoured for their noble act of saving unknown lives, at a function organised by Forte (Foundation for Organ Retrieval and Transplant Education) here today.



Former Chief Justice of Supreme Court M N Venkatachaliah talking to Ms Rani, wife of late Perumal, a cadaver organ donor, at the felicitation function organised by Forte to felicitate cadaver organ donors in Bangalore on Wednesday.

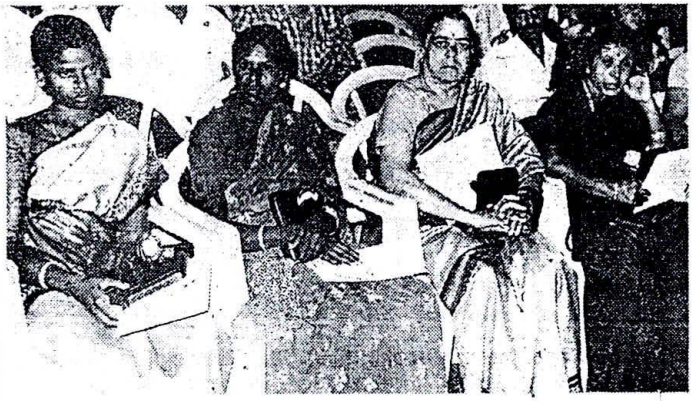
DH photo

For Kamalamma, it was a blend of happiness and sadness as she received the Forte award on behalf of her son Suresh, whose kidneys and eyes were donated after he died in a road accident. "I feel that my son is still alive as his pair of eyes have given sight to two people, and his kidneys have given life to two more," she said.

Former Chief Justice of the Supreme Court M N Venkatachalaih presented the awards to the family members on behalf of the donors.

Ms Rani, wife of late Perumal, a construction worker from Dharmapuri in Tamil Nadu who died of head injuries in the City last year, received the award on behalf of her husband. Suchitra, an 18 year old, also had donated kidneys. Her mother received the award. Ms Nagalakshmi, wife of late Vishweshwaran (58), had readily agreed to donate her husband's kidneys and eyes, when he died in a road mishap. The family members of Suchitra (18), and Lobu (26) also received the awards.

Mr Venkatachaliah, speaking after presenting the awards, said awareness regarding cadaver transplantaiton was very less in the country. More than 85 per cent and 60 per cent of transplantions in Europe and America, respectively, were cadaver transplantions, but, its percentage in India was a meagre one per cent, he lamented. Several celebrities including sports personality Ashwini Nachappa, ACP K C Ramamurthy, IGP (Prisons) Vijay Sasanur, a visually impaired bank employee Paul Mudda pledged to donate their organs after their death.



Family members of persons who donated their organs, who were felicitated by FORTE and Rotary Club at a function in Bangalore on Wednesday.

FORTE honours families of organ donors

BANGALORE, NOV. 10. The families of 26-year-old Logu a factory worker, Suresh; 18-year old Suchitra; Perumal, a construction worker, and 65-year old Visweswaran were on Wednesday felicitated by the Foundation for Organ Retrieval and Transplant Education (FORTE) and Rotary Club of Bangalore. All the five were injured in accidents from which they did not recover and their organs were donated by their family members.

Mr. Justice Venkatachaliah, former Chief Justice of India, who gave away the awards, said the families deserved "unstinted respect and support". He hoped the act of charity of donors "inspired the rest of us".

Regretting that society in the country was a fractured one, he said it was made up of heterogeneous assemblage consisting of groups in conflict with each other. Citing the example of U.S., he said 60 to 70 per cent of the transplants came from cadaver sources. In Europe too, 85 per cent came from cadaver and only about 15 per cent from live donors. "But in India, 99 per cent of transplants are from live donors," he said.

Mr. A.Sengupta, Secretary, Health and Family Welfare, Government of Karnataka, released a newsletter of the organisation.

Ms. Aswini Nachappa, athlete, Ms. Kiran Mazumdar Shaw, entrepreneur, and her husband, Mr. John Shaw, Mr. Vijay Sasnur, IGP (Prisons), Mr. K.C.Ramamurthy, ACP, and Mr. Prasad Bidapa, fashion choreographer, were the 11 celebrities who signed cards today pledging to donate their organs.

Brain-dead man gives heart to needy one

Karnataka's first transplant could give Bangladeshi a new lease of life

Health Correspondent

BANGALORE: Mujibur Rehman, the Bangladeshi patient who was written about in these columns on Sunday (*Does anyone have a heart to give?*) finally received a heart the same morning. Thanks to the goodwill and express desire of the family of 48-year-old Preetranjan Singh, who had died of a stroke. With this, the first heart transplant has been carried out in Karnataka.

Preetranjan Singh

It may be recalled that Rehman had been waiting for a donor heart at the Manipal Heart Foundation (MHF) for over a year. Even as his condition worsened, he saw two others succumb to end-stage heart ailments. The transplant comes a year and a half after three hospitals — MHF, Jayadeva and St John's — were recognised by the Karnataka government for carrying out heart transplants.

A team led by MHF Vice-President Devi Prasad Shetty carried out the transplant on the 36-year-old patient. While the main surgery itself took about four hours, the team was in the operation theatre between 9 p.m. on Saturday and 6 a.m. on Sunday as part of the preparations and follow-up for the state's pathbreaking medical event.

Speaking to reporters after the marathon surgery, Shetty said: "We received a call from Rebecca Thomas of FORTE (Foundation for Organ Retrieval and Transplant Education) yesterday evening saying that the relatives of a 48-year-old man who had died at Mallige Nursing Home were keen to donate his organs. The team of experts appointed by the state government certified the person brain-dead a few hours later."

With this having been done, the MHF surgeons removed his heart and with the help of police escort reached MHF in about 10 minutes and began work on the transplant.

On chances of the transplant turning out to be a success, Shetty explained: "The next few days are going to be critical. All organ functions will have to be monitored. There are possibilities of rejection. Also, the transplant has come almost a year late as he kept waiting for a donor heart to come through. In that period, his kidneys, lungs and liver have taken a serious beating."

Rehman apparently woke up after the surgery around 8.30 a.m. and obeyed oral commands.

▶ Tears of pride, page 3

DECCAN HERALD, MONDAY, FEBRUARY 21, 2000

First heart transplant in State a success

DH News Service

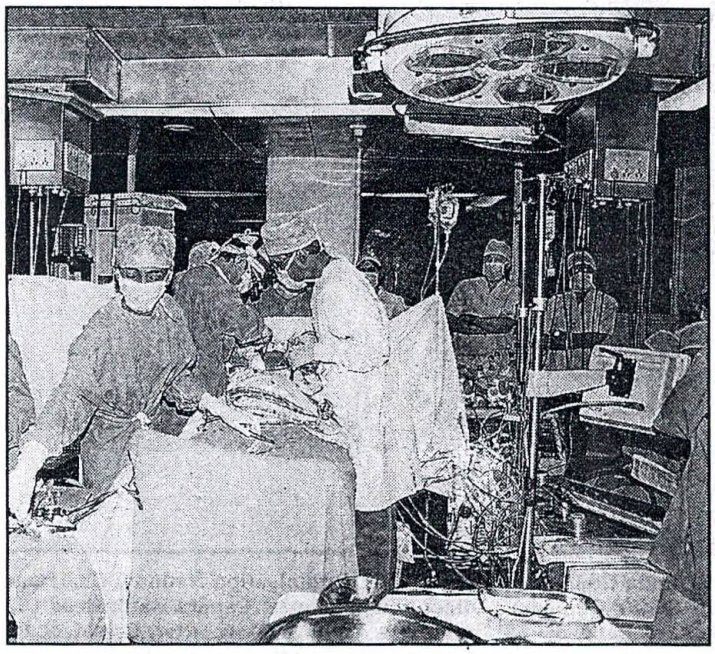
BANGALORE, Feb 20

A team of heart surgeons from the Manipal Heart Foundation (MHF) here have successfully performed a heart transplantation, said to be the first such operation conducted in the State.

The generosity of the family of a 48-year-old man to donate the heart of their loved one has provided a new lease of life to Mr Mujibur Rahman, a Bangladeshi national, who had been waiting for a donor to gift him a heart for the past one year.

MHF Vice-President Dr Devi Prasad Shetty told reporters that the patient made a smooth recovery after the five-hour operation, which was conducted in the wee hours of today. The patient woke up at 8:30 am and responded to oral commands. The operation was conducted at 3 am. However, the next few days are going to be critical period where various issues like organ function and controlling the rejection have to monitored, he added. The patient suffered from cardiomyopathy disorder and had reached "end stage heart failure and compromise liver and kidney function".

Explaining the sequence of events, Dr Shetty said that at around 6 pm on Saturday the MHF received a call from Ms Rebecca Thomas of Foundation for Organ Retrieval and Transplant Education (FORTE), a social organisation, explaining about a 48-year old man who had a massive stroke causing brain death.



Heart surgeons of the Manipal Heart Foundation conducting the first heart transplant in the State, in Bangalore on Sunday.

DH photo

The relatives of the deceased expressed their desire to donate his organs.

At 7:30 pm, the team of experts appointed by the government, to clarify brain death, gathered at Mallige Nursing Home and declared him brain dead. The team of heart surgeons from the MHF removed his heart and reached Manipal Heart Fundation in 10 minutes and successfully performed the heart transplantation at 3 am.

Even after the State Government recognised MHF, Jayadeva Institute of Cardiology and St John's Medical College Hospital for performing heart and heart-lung transplatations one year ago, this is the first such heart transplant in the state. The main reason for the lack of transplantations, Dr Shetty says, is due of the lack of donors and proper awareness among the public.

"Heart transplantation is in fact among the simplest of heart operation. It is much more difficult to repair a damaged heart," says Dr Shetty.

"Not many persons are ideal donors and the brain dead person should be in a nursing home or a hospital where they can put him on a heart lung machine".

Only about 10 heart transplants have been done in the country. Karnataka is the third State after Delhi and Tamil Nadu to conduct heart transplants. More than 2,000 heart transplantations are carried out every year in the United States alone.

Dr Shetty said in an ideal heart transplant, the patients have a 60 to 70 per cent chance of survival at the end of five years, which is quite significant given that without the transplant their chance of survival is negligible.

BANGALORE TIMES - FEB. 29, 2000

ORGAN DONATION: WISH MORE HAVE HE HEART TO HELP

Ar[illegible] Chowdary

T[illegible] nuggy Saturday morning did no[illegible] deter the 2,000-odd supporters who thronged the steps of Vidhana Soudha for the walkathon organised by Forte (Foundation for Organ retrieval and transplant education). Their message: Life can be a relay race, so be an organ donor. The relay race concept was created to enforce the importance of team work for victory which is the pivot of any transplant procedure.

Organ donation is suddenly in the news again. The shock waves following the death of Mujibur Rehman, heart transplant patient, brought with it speculation and skepticism about heart transplant possibilities in the city, but the hope for success in the future has not been entirely squelched. The walkathon by Forte came as a gust of fresh air, dispelling pessimism and reiterating the enormous need for organ donation in the city.

"One body that is donated can give eyesight to two people, a heart [illegible] liver to another person and kid[illegible]eys and lungs to two more people," says Dr Devi Shetty of the Manipal Heart Foundation.

"But for a successful transplant, the recipient has to be in optimum shape. Mujibur Rehman had been a terminal heart patient for over a year and after the transplant, he suffered from multiple organ dysfunction."

According to Dr Devi Shetty, there are between two to three lakh people in the country waiting for a heart transplant. More than 100 brain deaths occur a day in the country due to accidents on the road, but there are still no donors.

"The reason why heart transplants have taken so long to happen in Bangalore is because we had to wait for a donor to come forward. If there had been enough donors, there would have been over 100 transplants by now," he says.

"We constantly need the support of society," says Rebecca Thomas, Honorary secretary and transplant co-ordinator, Forte. "Besides which, a transplant programme also requires the timely co-operation of neurosurgeons and neurophysicians who diagnose and certify brain deaths. Forte is the co-ordinating organisation that makes sure that the organs donated are used in best possible manner. Allocation of organs is entirely on a point scoring system where the most medically needy person will be given the organ first."

Dr. R. Prabhakar, who was a consultant CT surgeon at Royal Perth hospital in Australia and is an experienced cardiovascular surgeon says what is important in a transplant procedure is timing and organisation. "I once had a patient who attempted suicide by jumping off the 11th floor of a building," he says.

"He fell head first and was soon declared brain dead. Since there was no-one to match his blood group in that city, we had to fly to another city on a chartered plane. All this required networking with the traffic police, the airports, the hospitals and everyone else involved."

According to Rebecca Thomas, there is both infrastructure and networking already available in Bangalore. "We have delivered organs in less than ten minutes from one point in the city to another with police escort," she asserts.

"In fact, we have flown organs to neighbouring state hospitals like CMC Vellore and other hospitals in Chennai when recipients of the same blood were not available. Today, there are three hospitals in the city that are certified to conduct heart transplants."

Vishal Bali, General Manager of Wockhardt, says that there are more religious and sentimental issues involved in India where transplants are concerned. "Are we ready emotionally as a city for heart transplants?" he asks."I also believe we need a system where institutes work together and leverage from the strength of the other."

The irony lies in the fact that even in the west where transplants have been happening for so long, only 12 per cent of the people asked for donations actually consent. Doctors observe that if we in India have at least a 10 per cent response it would be enough, to cater to the needs of most of our patients. The walkathon was the beginning of a crusade that should have begun long ago.

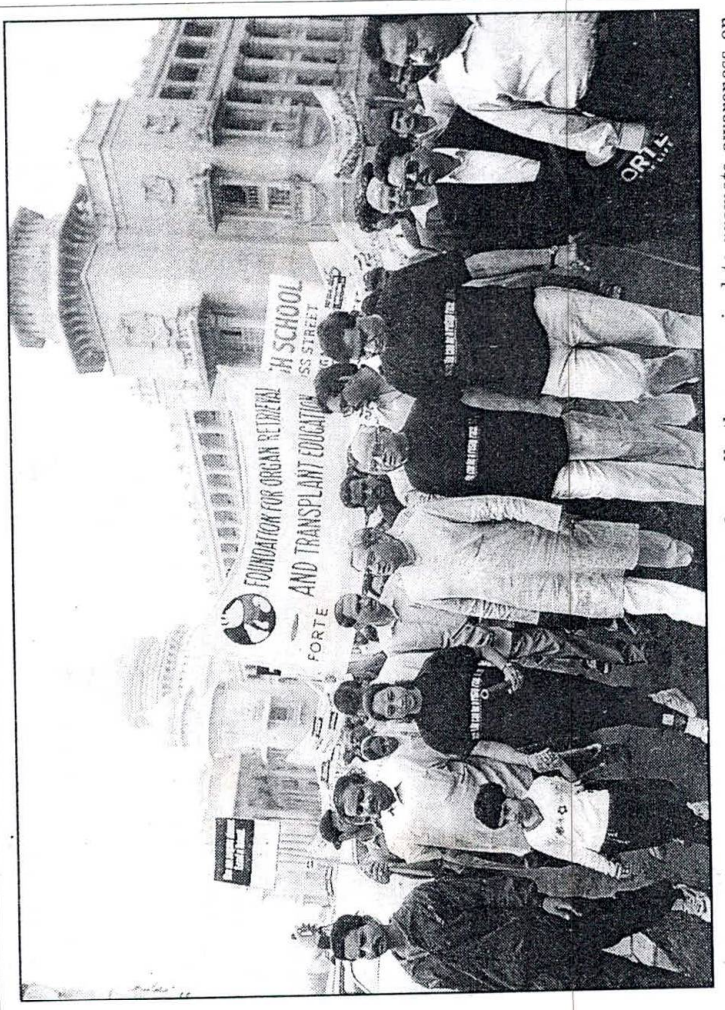
Walkathon to promote organ donation

BANGALORE, Feb 26 (DHNS)
The efforts of the Foundation for Organ Retrieval and Transplant Education (Forte) has helped give life to 20 patients suffering from end stage diseases. With Forte's help, twelve families in Karnataka have donated the organs of their loved ones after death to patients whose very life depended on it, according to the Foundation.

The Foundation, which had organised a walkathon today here to spread the awareness about the importance of organ donation, was flagged off by Chief Minister S M Krishna near Vidhana Soudha.

The walk passed through Raj Bhavan Road, GPO circle, Chinnaswamy Stadium road, and Kasturba Road before it ended at the Kanteerava Stadium.

Ashwini Nachappa, Sunil Abraham, Roger Binny and many other well known personalities also took part in the walk.



Chief Minister S M Krishna participating in the walkathon organised to promote awareness on cadaver organ donation in Bangalore on Saturday. Ms Ashwini Nachappa is also seen. DH photo

MP-16.

FORTE
GIFT OF LIFE

FOUNDATION FOR ORGAN RETRIEVAL AND TRANSPLANT EDUCATION

SF-7, Business Point, 137,
Brigade Road, Bangalore 560 025

Ph: 2237045, Fax: 2241284

After 5 pm
Rotary-TTK Blood Bank,
Ph: 5287903

Or 5533254
Page: 9624-210261

ABOUT FORTE

Foundation for Organ Retrieval and Transplant Education (Forte) is a voluntary, not-for-profit, not-hospital-based organization in Bangalore. It serves all recognized transplant centers and coordinates the cadaveric transplant activity, i.e. identification of potential cadaveric donors, assist in donor maintenance, grief counseling, securing consent from the donor family for organ retrieval, selection of the suitable recipient based on allocation criteria etc. It is also involved with spreading the message of organ donation through various educational and awareness programmes taking help from the media. The board of trustees consists of eminent people from different walks of life (legal, police, rotary, chartered accountant, media etc.) who are known for their dedication, integrity and transparency.

10 in Blr

The cadaveric programme and similar coordinating bodies have been in existence abroad for many years. However, for our country, FORTE is the only one of its kind and serves as the role-model for the rest of the country.

THE CURRENT TRANSPLANT SCENE AT BANGALORE

Human Organ Transplant bill was passed by the Indian Parliament in 1994. This defined "brain-death" and paved the way for cadaveric organ donation. Also, it laid down penalties for the criminal offences related to organ-trafficking.

Unfortunately, the Bangalore transplant scene continues to be pathetic with the live unrelated donor programme, ie. Paid Organ Donation in full swing with unethical practices, appearance of touts etc. etc.

Clearly the monitoring of transplant activity with the Appropriate Authority, the Authorisation Committee has failed miserably. The data about number of transplants and kind of transplants done etc. is simply not available.

Law Safety Chairman

If nothing is done about this, it is only a question of time before another major scandal breaks bringing shame to Bangalore!

.... 2,

RECOMMENDATIONS

1) It is suggested that Transparency in the process of Transplantation must be established at the earliest. The establishment of the Transplant Registry with a longitudinal follow-up is a must. The data should be available and accessible at all times.
2) Tracking down of middlemen and touts is an urgency. It should not be a one-time task but an ongoing activity so that they do not surface again.
3) The government could help in creating awareness about organ donation with the help of mass media etc. A television clipping is ready in English and Kannada to be telecast frequently.
4) The Authorisation committee should consist of people with a background of "Psychosocial Counseling"also. FORTE could accredit these people with the help of experts. The Authorisation should be made public to invite objections if any.
5) FORTE is willing to take up an advisory role to the government on issues related to transplantation. It may give guidance regarding policy matters on this subject. This role may be considered as similar to the one played by the "The Public Affairs Committee".
6) Within the task force, there should be a cell which will monitor the Appropriate Authority and the Authorization Committee and give them guidelines from time to time

1), 2), and 3) can be taken up immediately.

(Dr. K. D. Phadke)
Chairman, Forte

(Mrs Rebecca Thomas)
Hon. Secretary, Forte

MP-16.

FORTE

FOUNDATION FOR ORGAN RETRIEVAL & TRANSPLANT EDUCATION

November 1999

CADAVER TRANSPLANT WORKSHOP AT PUNE

On 7th May 1999, the K.E.M. Hospital and the Pune Transplant Society organised a workshop on Cadaver Transplantation at the Turf Club.

Five hospitals in Pune are recognised for Transplantation. Thirty five delegates consisting of doctors and social workers representing these hospitals took part. Dr. F. F. Wadia, Director of the K.E.M hospital made the introductory speech.

Dr. K. Rajamani, Neurologist at the Jehangir Hospital spoke about the diagnosis & certification of Brain Death. Mrs. Rebecca Thomas, the Secretary of FORTE, spoke on grief-counselling and Donor family motivation. Dr. Anil Godbole, transplant surgeon at the K.E.M. hospital spoke on Donor maintenance in the Intensive Care Unit.

The afternoon session was devoted to sharing the experience gained in working the programme. Ms.Arti Gokhale & Ms. Rohini Sahastrabuddhe, social workers, spoke on their experience in the Government hospitals and Ruby Hall. They were handicapped by the paucity of networking among hospitals, and related an instance when a donor was available but the organs could not be placed for want of suitable recipient. Mrs. Rebecca Thomas shared with the participants the Bangalore experience in organising the programme and setting up an Organ Procurement Organisation.

A Public Relations firm had been involved in the activities. Ms. Sheetal Pinto, who was handling this work at the firm, participated in the deliberations. The Pune Transplant Society will be bringing out Donor Cards and brochures in consultation with this firm. They will also be undertaking public awareness campaign.

The concluding sentiment at the workshop was that a non-hospital based organisation should be set up to conduct these activities, and the Transplant society would remain in the background, only providing technical inputs and support whenever needed.

EDITORIAL

"How is the Cadaver Transplant Programme going?" is the question we are asked often nowadays. Quite understandably so, considering what FORTE stands for. Answering this with the expected degree of honesty is more than a mere matter of words. We need to introspect a great deal on the answer.

That several thousand patients in the country have end-stage organ failure is well known. Most of them die eventually for want of transplants. This unpleasant truth is banished from our collective conscience by refusing to acknowledge it exists. We have to introspect, and find solutions. Such introspection could be agonising, for it is bound to throw up very unpleasant truths.

The most unpleasant truth is the lack of motivation among organ donors. It is common knowledge that there is a flourishing Bazaar in Kidneys - Transplant Act, or no Act. Its ethical ramifications do not seem to bother anyone any more. Even the live related programme in several institutions languishes as "market forces" prevail. So much for the kidneys, but what of the liver, the heart, etc.?

This is the area in which we need to work most. The recognition granted to the National Institute of Mental Health & Neurosciences, as a Donor Institution, is path breaking. This should lead to the recognition of more such centres that provide excellent facilities for the care of Neurologically injured patients. This should be combined with the availability of motivated grief-counsellors who can enable the families make the decision to donate. The number of organ donations is bound to increase. Our experience to date tells us that this counselling is the key to a successful donation.

While there is considerable interest evinced by various sections of society in all this, the number of donations is still abysmally low. This is what we feel needs to be done to improve matters:

- Keep the issue of organ donation in the public mind and eye through a sustained, multi-pronged awareness programme .
- Work hard towards providing counselling services in all transplant centres (something that most still do not have in place).
- Bring pressure on the government to be part of the campaign promoting organ donation, as it has been in the case of Eye donation, Pulse-polio programme, etc.
- Build-up a countrywide network of organisations working for this cause, so that it gains more acceptance and awareness spreads
- Above all, convince doctors, medical institutions and public that "Organ Bazaars" are a short-sighted and hazardous solution.

CADAVER TRANSPLANTATION WORKSHOP AT CALICUT

The Department of Nephrology, Calicut Medical College and the Calicut Nephrology Club jointly organised a workshop on Cadaver Transplantation at Calicut on 24th April 1999. The aim of the workshop was to familiarise prominent sections of the public with different aspects of Cadaver organ donation and transplantation.

Mr. Jacob Punnoose, I.G. of Police (Northern Range) inaugurated the workshop. Calicut Medical College was one of the earliest to start a Kidney Transplant programme in Kerala and appropriately, Dr. Roy Chally, the founding figure of that programme, introduced the theme of the workshop to the gathering. Dr. Thomas Mathew. Head of Nephrology made the introductions.

Dr. Philip Thomas, Medical Director of FORTE, went over the history of Organ Transplantation in the inaugural talk. Dr. Sanal Kumar, Neurosurgery Professor, spoke on the diagnosis and certification of Brain Death. Dr. Philip Thomas spoke on the management of brain dead donors in the Intensive care

setting.

This was followed by the a talk on grief-counselling for the donor families and the psychological and emotional nuances of obtaining consent for organ donation. Mrs. Rebecca Thomas, the Secretary of FORTE, spoke on the experience gained in setting up an Organ Procurement Organisation in Bangalore. Dr. Georgy Ninan from the Medical Trust Hospital spoke on the experience in setting up such an organisation in Cochin. This was followed by a talk on Organ Allocation Criteria.

The final session was devoted to discussing the possibility of networking transplant centres in Kerala. The four centres in Calicut would first come together followed by a network covering the cities of Calicut, Cochin and Trichur.

Over 50 participants attended the workshop. They included Police officers, members of the Clergy, Social workers, Presspersons and prominent members of the public. Besides these, Nephrologists, Transplant surgeons, Neurologists, Neurosurgeons, Anaesthesiologists and Postgraduate students from different disciplines attended.

The workshop was followed in the evening by a public function attended by Kidney transplant recipients and their families from all over Kerala, besides others. At this function too, the concept of Cadaver organ donation was introduced and discussed.

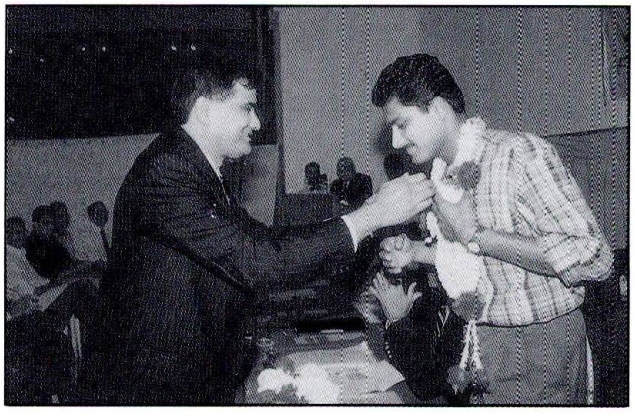
The transplant community and public in Kerala confirmed their preference for a neutral procurement organisation.

" "Do not take organs to heaven; heaven knows we need the organs here".

Fortescan

Recipient registration:

Anil Kumble, the world-renowned spin bowler, launched Forte's recipient registration on 29th June 1997 and became the first voluntary organ donor in Karnataka. It was a symbolic act which was to herald the beginning of a systematic Cadaver Transplant Programme in India. A public awareness programme was also launched by Forte in partnership with Rotary District 3190.



Dr Kishore D Phadke, Chairman - Forte, felicitating Anil Kumble on becoming the first voluntary organ donor in Karnataka

CADAVER ORGAN TRANSPLANT

The first organ donation in Karnataka from a cadaver came from the parents of Usha Gowri, a medical student from Shimoga, who sustained fatal head injuries in a road accident. The heightened

awareness resulted in a number of cadaver donations. On 4th September 1998, Shri Khurshed Alam Khan felicitated the families of the year's donors at a touching function at the Karnataka Raj Bhavan. Donor cards were signed by celebrities like N. Ram (Editor, Frontline), Vani Ganapathy (Danseuse), Sudharani (Film actress), Ashok Rao (Film artiste), B.S.Chandrasekar (legendary Indian leg-spinner), Srinath (Film actor) and Dr. MC Modi (Eye surgeon).

Shri Khurshed Alam Khan felicitating a donor family.

Mankind owes its gratitude to the Cadaver Organ Donors ... they made a gift of life

Veerabhadriah: A 44-year-old KEB employee who sustained a severe head injury due to a fall during the course of his work. Although devastated by his accident and the news that there was absolutely no chance of survival, his wife and grown-up sons took the decision to permit one of his kidneys to be used to give another person a new chance of life. KEB colleagues were also very supportive of the family's decision and encouraged the organ donation.

Sivaprasad: This impulsive teenager fell prey to a situation that all youngsters are susceptible to - the thrill of riding a two-wheeler without a valid license. He decided to borrow his father's bike and his inexperience led to a fatal accident. As always, it was an irreparable loss to the family. But they could look beyond themselves at other lives that could benefit from the donation of his kidneys, corneas and even his heart and gave consent for all his organs to be retrieved and transplanted. A truly generous family. Unfortunately, there was no suitable recipient for his heart and hence it was not retrieved but both his kidneys and corneas were transplanted successfully.

Vishweswaran: The reckless driving of somebody else took the life of this gentleman at the prime of his life. His wife also suffered serious injuries in the accident but despite the fact that life had dealt them this severe blow through no fault of their own, the family wanted to give to society and help someone else in need. This noble gesture on their part made a world of difference to two individuals with end-stage renal failure and brought the gift of sight to two others.

Suresh: He was another young victim of a road traffic accident - a problem that has reached mammoth proportions in Bangalore and needs urgent attention. This 25-year old gave a new lease of life to two renal failure patients and the gift of sight to two others as a result of the courageous decisions taken by his wife and other family members.

Sujithra: Families such as Sujithra's are indeed rare and one does not cease to be amazed at the goodness in peoples' hearts. Sujithra was the victim of a tragic accident that left her family inconsolable. However, this young student had a vision problem in early childhood and although this had been corrected, the parents knew how difficult it was for a child with visual impairment to manage in society. When her

father realized that her life could not be saved and the counselor made the request for eye donation, he had no hesitation whatsoever in giving his consent. The thought that another child would be able to see through the eyes of their beloved daughter was enough motivation for this family. They also gave consent for their kidneys to be transplanted..

CADAVER TRANSPLANTATION SEMINAR IN MUMBAI

The National Organ Donation Campaign is an umbrella organisation constituted by the Liver Transplant Group at Jaslok & Bombay Hospitals, the Narbada kidney Foundation, the Eye Bank Association of India, the Social Workers' Association and the All India Society for Voluntary Donation of Human Body & Cadaver Organs after Death for Transplantation.

This group and the Appropriate Authority of the State of Maharashtra organised a Seminar in Mumbai on May 8th 1999. The Assistant Director of Health Services, Govt. of Maharashtra, delivered the keynote address and inaugurated the seminar. He spoke at length about the steps taken to implement all the provisions of The Transplantation of Human Organs Act in his state, including setting up of the Zonal Co-ordination Committee.

"Do not burn or bury organs, donate them."

Dr. Sanjay Nagral, Consultant Surgeon at the Jaslok Hospital made a very interesting slide presentation giving an overview on Brain Death & Organ Donation. Subsequent speakers dealt with diagnosis & certification of Brain death, I.C.U. management of donors, etc. Mrs. Rebecca Thomas spoke on the Bangalore experience.

An interesting sidelight that emerged was the fact that the Zonal Co-ordination Committee set up by the government had proposed huge monolithic organisational structure for the co-ordinating agency. This included setting up of a 40-member committee to prepare "detailed concrete proposals" like recruiting office staff, procuring office space, allotting a budget, etc., for submission to the Government.

Fortunately, at the Open Forum held at the conclusion (chaired by Dr. S.K. Mathur from Bombay Hospital and Dr. Mohit Bhatt from Jaslok hospital), the sentiment was for setting-up a non-hospital based co-ordinating agency, which hopefully will be more effective.

Does my religion approve of organ donation?

Compiled by Stan Simbal

An often-heard question when organ donation is being discussed is "Does my religion approve?" Recently the New York Regional Transplant Program published the views of major religions on the subject. Here are those positions.

Amish: Approved if there is a definite indication that the health of the recipient would improve, but reluctant if the outcome is questionable.

Buddhism: Donation is a matter of individual conscience.

Catholicism: Transplants are acceptable to the Vatican and donation is encouraged as an act of charity

Christian Science: no position, leaving it to the individual.

Greek Orthodox: No objection to procedures that contribute to restoration of health, but donation of the entire body for experimentation or research is not consistent with tradition.

Hinduism: Donation of transplant is an individual decision.

Islam: Donation of transplant is a individual decision.

Jehovah's Witness: Donation is a matter of individual conscience with provision that all organs and tissues be completely drained of blood.

Judaism: Jews believe that if it possible to donate an organ to save a life, it is obligatory to do so. Since restoring sight is considered life saving, this includes cornea organ transplantation.

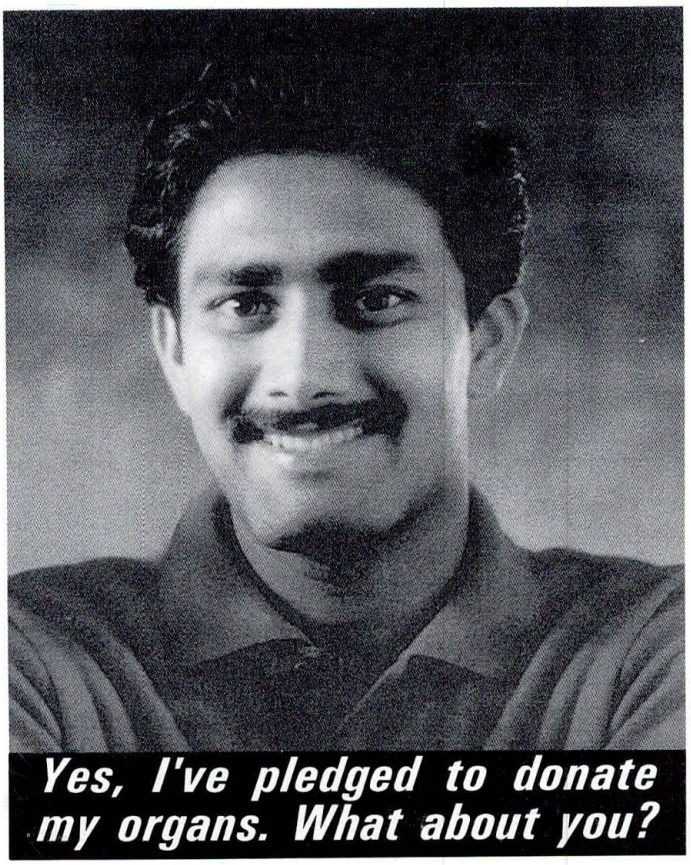
Protestantism: Encourage and endorse organ donation.

Mormon: Donation of transplants is an individual decision

Quaker: Donation or transplants is an individual decision.

Edited by : Dr. A. Mohan, Co-Editors : Mr. K.N. Prabhashankar, Mrs. Rebecca Thomas

'Even after I am gone, a part of me can come back for a second spell'



Heart, lungs, kidneys, liver, pancreas, heart valves and eyes can be donated after death. You too can pledge your organs, or help donate those of a brain dead loved one, so that another human being can get a new lease of life. Quite truly, the most valuable gift you can ever give.

FORTE

Foundation for Organ Retrieval and Transplant Education

Be an organ donor. Give life a chance.

If you wish to know more about FORTE and its activities, kindly write to:

The Secretary, FORTE (Foundation for Organ Retrieval & Transplant Education),
SF-7, Business Point,137, Brigade Road, Bangalore 560025.
Phone: 2237045/5533254 Fax: 2241284 Hotline..98450-06768
Website: www.forteindia.com

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UROLOGICAL SOCIETY OF INDIA
33rd - ANNUAL CONFERENCE
January 20 - 23, 2000.

USICON 2000 HYDERABAD

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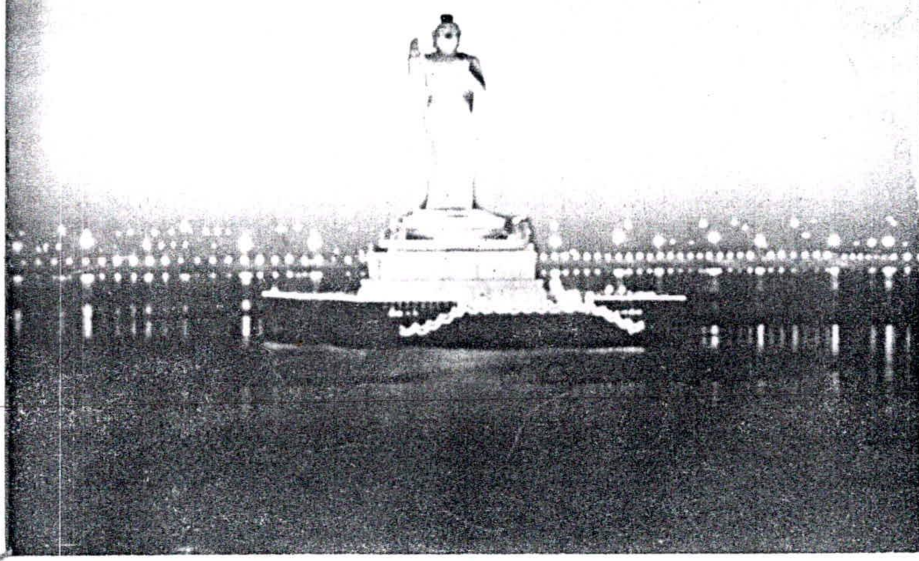
ABSTRACTS



USICON 2000 PEARLS

THE UROLOGICAL SOCIETY OF INDIA

ABSTRACT BOOK OF
33rd ANNUAL CONFERENCE OF
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20th - 23rd JANUARY 2000
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**DEPT. OF UROLOGY
APOLLO HOSPITAL, CHENNAI.**

INTRODUCTION: Organ donation by live related subjects is the predominant mode of kidney transplantation in India. The protocol of donor investigation is organised primarily around safety aspects of the donor and secondly on the suitability of the organ for transplantation. However certain complications are observed which lead to continuous improvements in this protocol and makes it more elaborate and complete. There is a controversy regarding the frequency of hypertension and focal segmental glomerulosclerosis and hyperfiltaration injuries occuring in these patients.

MATERIAL & METHODS: We retrospectively reviewed our result of the renal donors since 1985. These donors were perfectly healthy normotensive and had no evidence of infection. They underwent donor nephrectomy through the standard supracostal flank approach with resection of the 11th rib. The immediate and delayed post operative surgical complications were studied.

Over and above a detailed pre operative work-up including GFR, these patients were checked for their blood pressure, blood urea and urine protein excretion 3 months later, and subsequently once every year. Three patients who had donated their kidneys else where reported to us with renal complications.

RESULTS: The incidence of post operative fever, wound infection were studied, the respiratory complications including upper respiratory infections and their caused are studied the postoperative stay in the hospital was 7 days. Three donors developed acute renal failure in the post operative period. Two donors had nephrotic syndrome, and five donors have reported to our institute with chronic renal failure out of whom one required transplantation himself and one is on hemodialysis, three are on conservative management. The causes and management of these complications are studied.

CONCLUSION: Although renal donor surgery is a safe procedure, it is not devoid of complications, and a detailed explanation regarding these possibilities as well as improvements in the pre and post operative donor management protocols is a primary responsibility of the treating physician.

MP-16.

MEDICINE

A surgical feat

Doctors at the Chennai-based Madras Medical Mission Hospital perform a second heart-lung transplant procedure.

ASHA KRISHNAKUMAR

TWO years after conducting its first heart-lung transplantation, the Chennai-based Madras Medical Mission has performed the complex surgical procedure once again. Coimbatore-born Balamurugan Williams received a new heart and lungs on September 21, a day after he turned 20.

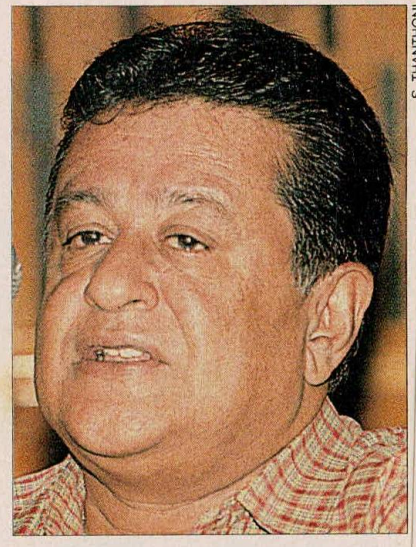
What a relatively simple surgical procedure to close a hole in the heart could have corrected, had, after 30 years, left Balamurugan's heart and lungs so damaged that only a transplantation could save him. He was diagnosed as having a hole in the heart when he was hardly three months old. From then on life became difficult for the poor family, of which Balamurugan was the only son, after four daughters. His parents consulted faith-healers and quacks, para-medics and doctors, and had to contend with such absurdities as "the hole will close by itself as the boy grows", and "surgery cannot be done on the small boy". Balamurugan's condition became increasingly unstable as he grew up and he could not attend school regularly. When he was 13, Balamurugan lost his father.

The hole in the ventricular septum led to the reversal of shunt, causing the mixing of impure and pure blood in the heart. This was followed by Eisenmenger's Syndrome, a disorder more commonly known as primary pulmonary hypertension, in which the blood pressure in the pulmonary (lung) arteries is abnormally high. Although its occurrence cuts across age and sex, it is more prevalent among women in the 20 to 45 age group and its incidence is low, affecting only eight in 100,000 people. While its exact cause is not known, it manifests itself in the form of increased resistance to blood flow. Diffused narrowing of the pulmonary arterioles enlarges the right side of the heart owing to the increased work load of pumping blood against the resistance to flow, and progressively damages the heart. Says Balamurugan's mother Kannamma: "His whole body would turn blue now and then and he would have to be rushed to the hospital for emergency treatment."

According to Dr. K.M. Cherian, Director, Institute of Cardio-Vascular Diseases, Madras Medical Mission, who has performed seven heart, one lateral lung and two heart-lung transplants in the last six years at MMM Hospital, there is no treatment for such a condition except a heart-lung transplantation.

Two years ago at a free health camp conducted by KG Hospital in Coimbatore, Balamurugan was advised a heart-lung transplantation. He was directed to MMM. From then on MMM took him under its care until a donor was found. The hospital did not charge him for the surgery. Says Dr.Cherian: "As in the case of the first heart transplantation we did in 1995, this surgery was also fully sponsored. The idea is to initiate such procedures in India and show that they can be a success." Nevertheless, he says the hole in the heart could have been cured by a simple surgery early on if it had been attended to by a specialist. Balamurugan needed a donor. His wait ended when the family of Sankari (41), road accident victim, decided at the Apollo Speciality Hospital to donate all her organs after she was declared brain-dead. Balamurugan was one of the six recipients of Sankari's organs. Her corneas and kidneys were donated to four persons in Chennai, and liver to a patient at the All India Institute of Medical Sciences, New Delhi.

As in the case of the first heart transplantation the Madras Medical Mission did in 1995, this heart-lung transplantation was also fully sponsored. The idea, according to Dr. Cherian, is to initiate such procedures in India and show that they can be a success.



S. THANTHONI

Dr. K.M. Cherian, Director, Institute of Cardio-Vascular Diseases, Madras Medical Mission.

As soon as the MMM Hospital got a call from the Apollo Hospital at 2-30 a.m. on September 21, a team of doctors comprising N. Madhu Shankar, Vijit K. Cherian and N. Kanagarajan (anaesthetist), went there to harvest the heart and lung after identifying; the blood group and the size of the lungs for compatibility. The most crucial aspect of the procedure, said Dr. Madhu Shankar, was time, as the harvesting of the organs and their transplanting took place in different hospitals and the latter procedure had to be completed within four hours of the former.

Even as the team was heading back to MMM with the donor heart and lungs kept in cold saline solution, another team, headed by Dr. Cherian, was removing Balamurugan's diseased lungs and heart. He was put on the heart-lung machine. First the donor lungs were sewn in place in Balamurugan's chest cavity, followed by the heart, which was attached to the opened back walls of the atria. The blood vessels were then connected and blood allowed to flow through the heart and the lungs. As the heart warmed up,

overlooks a building site. Ciona's installation reminds one that contemporary art is a public statement of a private perception that is deeply rooted in the ongoing processes of daily life, but that the parcelling out of different spheres of our existence into different pigeon-holes has broken the links between these. She restores the links to the viewer as he or she goes through her installation.

It is this role of the artist as the restorer of our lost humanity and the overtly political nature of this process that we come to appreciate them. One is not surprised to come to this understanding in Yokohama, for it is precisely over the question of the political nature of art that the Japanese artist Okakura Kakuzo differed from his U.S. mentor Ernest Fennolosa. It also reminds one that though contemporary art deals with universal truths, the way we deal with them in different places reflects the circumstances in which we wake up to them.

An inflatable six-storey-high figure of a cricket at the Yokohama Grand Intercontinental Hotel.

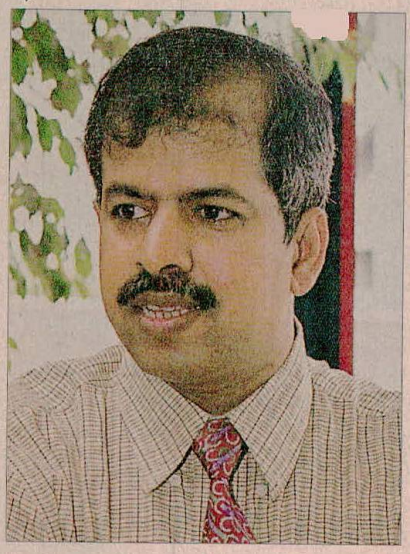
This is evident from three video films one could just pass over; but at the end of this journey, the films seem more important than most others. There is Vietnamese artist Jun Nguyen-Hatsushita's Memorial Project Nha Trang, Vietnam "Towards the Complex-For the Courageous, the Curious and the Cowards". It shows rickshawpullers pedalling rickshaws under the sea, rising up periodically to take a breath of fresh air. Can one not see in them the plight of the vast mass of humanity that is condemned to being marginalised on the "level playing field" of finance capital? How indeed does a man selling brute labour power compete with those using all that technology has to offer? The image of rickshawpullers pedalling under the sea to make some kind of a living shows both their determination and helplessness – an image that is perhaps the most representative one of capitalist society.

There is the Polish artist Krysztof Wodiczko's "Tijuana Projection" showing how people, the only commodity not allowed to move freely in a liberalised world, are degraded and oppressed when they are forced to migrate from areas of surplus labour to those of surplus capital (in this case from Mexico to the U.S.) by the force of an economic law that is twisted by capital to squeeze the maximum out of the working class while preaching free trade to them.

The answer is forcefully given in the Swedish artist Mats Hjelm's mix of the documentaries taken by his father and himself, which reminds us that many of the things the media with their own type of virtual reality have declared obsolete are still very relevant. One realises the relevance of Stokeley Carmichael's speech on how the violent preach non-violence to those they oppress and how one has to understand that violence is and can be used to end oppression just as it can be used to oppress; and of the confessions of U.S. airmen captured in Vietnam. I found this reawakening timely, especially as it was set in scenes of everyday life. And the last thing I saw in my hotel room in Tokyo was television images of the World Trade Centre towers in New York collapsing and the Pentagon burning. And I realised how the expression of art in the exhibition hall rang true in the reality of the world as well. Indeed, the television images reminded one that truth is stranger than fiction.

Other strange truths were reflected in two works. One is the Aust[illegible] artist Franz West's co[illegible] orative sculpture with an Italian artist, Ettor Spoletti, outside the Intercontinental Hotel. It was a red Isamu Noguchi circle surrounding a white Pentagon, reflecting the curious relationship of Japan with the U.S. with all its tensions intact. The other is Yoko Ono's German railway coach, with bullet holes and a beam of light disappearing into the sky on top, called "Love and Peace". Both seem to indicate that suppression is unnatural and has to end, however complex the process by which that happens. And it did breed a sort of hope in one.

Still, not everything was hunky-d[illegible] The individual vision of an artist often conflicts with institutional necessities. For example, Anita Dubey was not allowed to bring dust from India for her installation, Qai Guo-Qiang was unable to present his fireworks display because of the rules governing safety and Katya Guerrero could not block the roads with old cars in her performance. In such situations the artist may modify the perspective, as Dubey and Guerrero did. Others may opt out. That is the artist's prerogative. But the fact that the vast majority were able to create works of quality reflects on the wisdom of the four curators of the exhibition and their capacity to generate participation. And that, no doubt, will help give the Yokohama Triennale a lasting character among international exhibitions of contemporary art. ■



S. THANTHONI

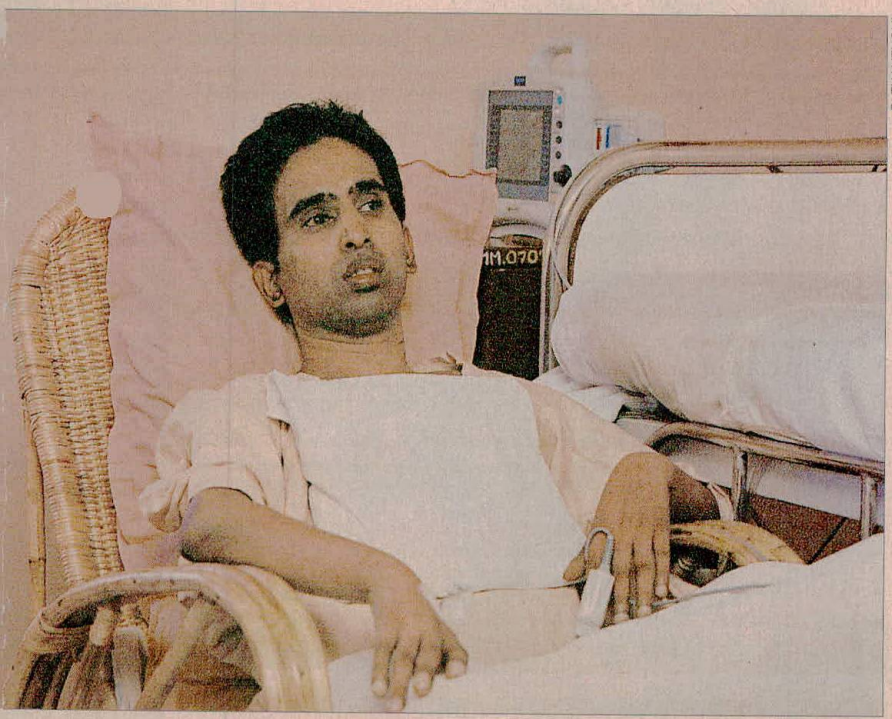
Dr. N. Madhu Sankar, cardiothoracic eon, Madras Medical Mission.

it began to pump blood. The doctors checked all the connected blood vessels and the heart chambers for leaks before taking Balamurugan off the heart-lung machine. Sankari's heart began to beat in Balamurugan's body at 5.30 a.m.

Says Dr. Madhu Shankar: "The transplant, which took about three hours, is technically demanding as care must be taken to preserve important nerves and to control bleeding." The success of heart-lung transplants is determined by the incidence of infection and rejection. It is important to guard against infection as lungs, unlike the heart, are directly exposed to the atmosphere. Says Dr. Madhu Shankar: "It is because of infection that we lost our first heart-lung transplant patient in 1999, 36 days after the procedure was performed. But this time, we are very careful." Balamurugan will be on medication for protection against infection and may remain in the hospital for about four months.

Chronic lung rejection, which comes in the form of a progressive narrowing of the small airways, is another major problem. Left unchecked, the auto-immune cells, which recognise transplanted organs as a foreign body, will damage the cells of the grafted heart and the lung tissues and eventually destroy them.

The incidence of rejection is monitored by a lung biopsy using a fibre-optic bronchoscope. As rejection can occur anytime after the transplant, immunosuppressive drugs are administered to transplant patients for the rest of their lives. Balancing the dosage of immunosuppressants is crucial because though the grafts need to be protected against the immune system, care must be taken to ensure that the immune system does not shut down completely as that would leave the recipient open to infections.



S. THANTHONI

Balamurugan Williams, recuperating after surgery.

The drug regimen is expensive. But Dr. Madhu Shankar is sure of getting sponsors for Balamurugan.

The first heart-lung transplant ever was performed in 1981. Since then there have been 2,698 such procedures across the world. In South Asia only two heart-lung transplants have been performed till now, and both were at MMM.

The survival rate of the recipients is encouraging – 90 per cent of them survive for over one year, 85 per cent for five years and 75 per cent over 10 years. One recipient is alive 16 years after the transplant. With developments in drug and technology, the survival rate is sure to improve.

According to Dr. Cherian there is no dearth of expertise or technology in India, but the problem lies in the lack of initiative among doctors, the high cost of the procedure and patient care, and the difficulty in finding donors. The donor had to be a non-smoker and the size of the lungs should match that of the recipient's. The lungs of accident victims are usually damaged or tend to contract infection while receiving emergency care.

The organ registry set up in 1999 by the MGR Medical University in Chennai is yet to take off. There are 140 people waiting for heart and heart-lung transplant at MMM. There is an urgent need to generate public awareness on organ donation. There is also an added problem for speciality hospitals such as MMM as they do not get trauma cases. They rely on other multi-speciality hospitals for the supply of organs from the brain-dead. Government hospitals, says Dr. Madhu Shankar, do not have enough ventilators to sustain the brain-dead until the organs can be harvested.

In order to reduce post-transplantation costs, Dr. Cherian suggests that the government abolish import duty on nitric oxide, a well-known mediator of biological functions and an important therapeutic agent.

MMM is one of the few institutions in the country that attempt complex surgical procedures. It set up the Chennai Transplantation Centre in 2000 and sent its coordinator, A.R. Krishnaswamy, for training in transplant management in the United States. Its transplant team has trained in several well-known medical centres of the world. According to Dr. Cherian, the government, philanthropists and the public can do a lot to sustain the hospital's initiative and help patients like Balamurugan who wait for a fresh lease of life. ■

Planning with software

A software package to promote the application of spatial data technologies in village-level planning, adopted in West Bengal's Bankura district, meets with some success.

NAUNIDHI KAUR
in Bankura

A BROKEN road links the Teghori village with the adjoining settlements in Bankura district of West Bengal. The road, which passes the hutments of the few thousand inhabitants of Teghori, leads to the one-room office of a local non-governmental organisation. Here one finds the spatial resource profile of the village on digitised maps. The maps are made using the Geo-Referenced Area Management (GRAM++) software package, which enables storage and analysis of spatial data on a personal computer. Evolved from experience gained in the Natural Resources Data Management System (NRDMS) Project of the Department of Science and Technology (DST), GRAM++ has been developed to promote the application of spatial data technologies to problems of resource management at the panchayat level.

GRAM++ has been developed as a United Nations Development Programme (UNDP)-assisted initiative to use Geographic Information System-based technologies for local-level planning. GIS is a software package developed to handle large quantities of spatial and attribute data. It aims to integrate data for natural resource assessment, rural and urban planning, image analysis of remotely sensed data, watershed management and impact assessment studies.

In the 22 blocks of Bankura district, the GRAM-GIS expertise has been in use since November 1996 in areas such as water conservation, energy management, land use planning and infrastructure development.

Said Asit Pal, member, Teghori panchayat: "With the results of the date analysis we know where to dig a pond, what the level of underground water is, and what crops to grow during the year. At the panchayat office we take a collective decision on how to use the data from the computer in planning for the future."

GRAM++ has been tested and demonstrated in the two pilot districts – Kolar in Karnataka and Bankura – covered under the project. The two districts have different geological terrain and hydro-meteorological characteristics. The project does not assume that there is a single method to address local contingencies and development needs. Nor does it envisage that guidelines have been produced by the pilot projects that can be applied throughout the country. Rather, it wants the responses from Bankura and Kolar to be used by district committees, villages and community groups to formulate their own approaches to rural development.

In Bankura the GRAM-GIS programme has succeeded in its primary objective, that of developing spatial data management tools. For instance, in Teghori a well and a pond were dug using GIS technology to identify recharge zones and water table levels respectively.

"The digging of the well has benefited 500 to 600 plots," said Sumit Roy, member of the School of Fundamental Research, an NGO. However, one of the questionable features of the programme is the time involved in identifying the areas of action. For instance, in Teghori it took one year to identify the spot to dig a pond. During this period, the project managers spent a considerable amount of time collecting and scrutinising data on the water

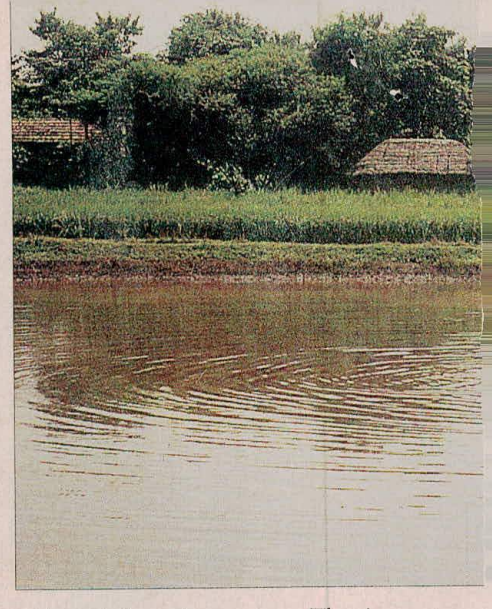


table and the recharge zones. The time-consuming process, some experts say, is the drawback of the programme.

Said Dr. Debapriya Dutta, Princ Scientific Adviser, Ministry of Science and Technology: "The software programme itself is not time-consuming. We would, however, like to strengthen our data-capturing facilities. Technology would not be sufficient to cut time but 'motivating' the people who collect data is the keyword here."

Indeed, efficient implementation of GRAM++ depends on prudent data collection. Hence considerable time and monetary resources are channelled towards the collection of data. The Bankura project generated its data from national agencies, including the Survey of India, the National Atlas and Thematic Mapping Organisation (NATMO), Kolkata, and the Census of India. Other national institutions such as the Indian Council of Agricultural Research (ICAR), the National Bureau of Soil Survey Land Use Planning (NBSSLUP) and India Meteorological Department also assisted. The gaps in data were filled with statistics provided by local NGOs.

The strength of the programme lies in identifying the missing elements in the data, which means there is no repetition of tasks and data are collected only for areas where they will be used for planning.

The data are collected in analog form and then converted into digital maps. The GRAM++ software is designed to digitise maps of any size. Its vector to raster conversion facility enables the analysis of geographic data in a raster environment. The attribute link of the programme helps in linking the digitised map to various associated data, the terrain module helps generate digital terrain modules that can cater to

MP-16

A protocol to prevent kidney failure

A project implemented in Tamil Nadu yields the encouraging finding that end stage renal disease, which leads to the total failure of the kidneys, can be prevented at an affordable cost.

ASHA KRISHNAKUMAR

A UNIQUE epidemiological study, which combines survey, treatment and monitoring, has helped draw up a validated low-cost protocol for the prevention of chronic kidney diseases. The eight-year study, the first of its kind in the world, was done at Sriperumpudur Taluk, 40 km from Chennai, by the Kidney Help Trust.

The state of a person's health is often directly linked to his or her lifestyle. With more and more people aping Western culture, which means a sedentary lifestyle and diets high in salt, fat and calories but low on fibre, vitamins and proteins, obesity is on the rise. This, in turn, is leading to a high incidence of hypertension and diabetes. A third of India's population is obese, over half suffers from hypertension and nearly a third has diabetes. Diabetes and hypertension are the primary causes of kidney and heart diseases, stroke and blindness. Nearly a third of the cases of kidney failure are linked to diabetes and over a tenth to hypertension.

The World Health Organisation (WHO) has predicted that if the current trend continues, India will become the "diabetes capital of the world" by 2025 with over 57 million affected people. Already, according to the International Diabetes Federation, India has over 33 million diabetics, the largest number in any country.

If in the 1950s 1-3 per cent of the population was hypertensive, recent studies show that this figure has risen to 25-40 per cent, particularly in the urban areas. It is the most serious risk factor for kidney and cardiovascular diseases. A diabetic is two-four times more prone to heart disease and 30 times more susceptible to renal problems than a non-diabetic. Seventy per cent of diabetics also suffer mild to severe nerve damage and vision impairment.

According to Dr. M.K. Mani, chief nephrologist in Chennai's Apollo Hospitals and managing trustee of the Kidney Help Trust, the alarming rise in the incidence of diabetes and hypertension can be halted only by primary prevention methods; lifestyle changes do not prevent the diseases, they only postpone their onset.

A serious fallout of diabetes is end stage renal disease (ESRD) or kidney failure. Chronic kidney disease is a silent epidemic of the 21st century. Its occurrence is not confined to developed countries; it is universal. Every year, over one lakh people in India are diagnosed with ESRD, necessitating a kidney transplant or continual dialysis.

The progression to ESRD usually happens over time through the following stages:

Incipient (sub-clinical) nephropathy: It is the stage of a persistent increase above normal in the urinary albumin excretion rate, also known as microalbuminiuria; in the absence of proteinuria, it may be accompanied by hypertension.

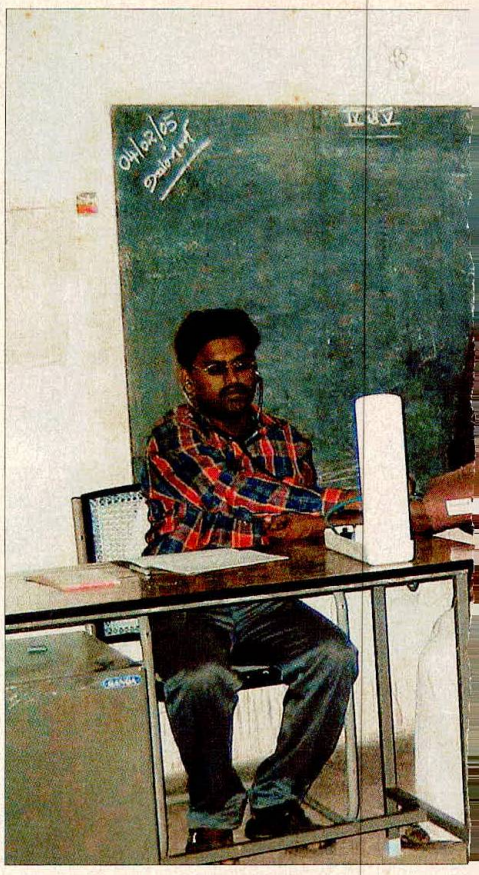
Clinical (overt) nephropathy: In this stage there is the presence of persistent proteinuria (>200 ug/minute or > 300mg/24 hours); and is usually accompanied by hypertension.

Advanced nephropathy: In this stage there is a significant deterioration of renal function, with a severe decline in the glomerular filtration rate (GFR) and the appearance of symptoms of uraemia and/or nephrotic syndrome.

End stage renal disease: ESRD necessitates dialysis or renal transplant.

Screening, detection, treatment and regular monitoring can help in reducing significantly the onset of ESRD.

Chronic kidney diseases, regardless of the diagnosis (that is, the type of kidney disease), include progressive kidney failure, complications from decreased kidney functioning, and development of cardiovascular diseases. There is increasing evidence that early detection and treatment prevents or delays some of these adverse outcomes.



At a school in the project area, waiting for the medical check-up.

Renal disease remains a major, though largely unrecognised, public health issue in India. An estimated one lakh people develop ESRD every year. This is in addition to a pre-existing pool of about 20 lakh sufferers. A person with ESRD requires renal replacement therapy in the form of either dialysis on a continuing basis or a renal transplant. Both are expensive options that require recurrent expenditure over the person's lifetime. Further, treatment for renal disease is still largely in the private health care sector, where the costs are high.

A large number of ESRD patients – those from rural areas and small towns where treatment is not available, and those who cannot afford the costs even where treatment is available – thus remain outside the pale of any kind of medical care.

In fact, 90 per cent of ESRD patients never see a nephrologist. A mere 9,000 are started on haemodialysis every year. But a whopping 60 per cent of them do not come back for dialysis, as they are unable to afford the programme. Nearly 20 per cent of the remaining die because of complications or inadequate dialysis. Only a small set of patients continues on maintenance dialysis. Some 20 per cent of the patients who consult a nephrologist opt for transplantation

(Above) The French Mirage 2000-5 Mk2. (Left) The Russian MiG-29 M2.

off/maintenance wastages. Ironically, the IAF's Mirages, which have an exceptional flight safety record, suffered four mishaps in 2004. While two were attributed to human error, one occurred when the aircraft's main wheel came off as the pilot pulled in the undercarriage after takeoff. The fourth one occurred when an engine blade broke off in a trainer causing a restriction of power.

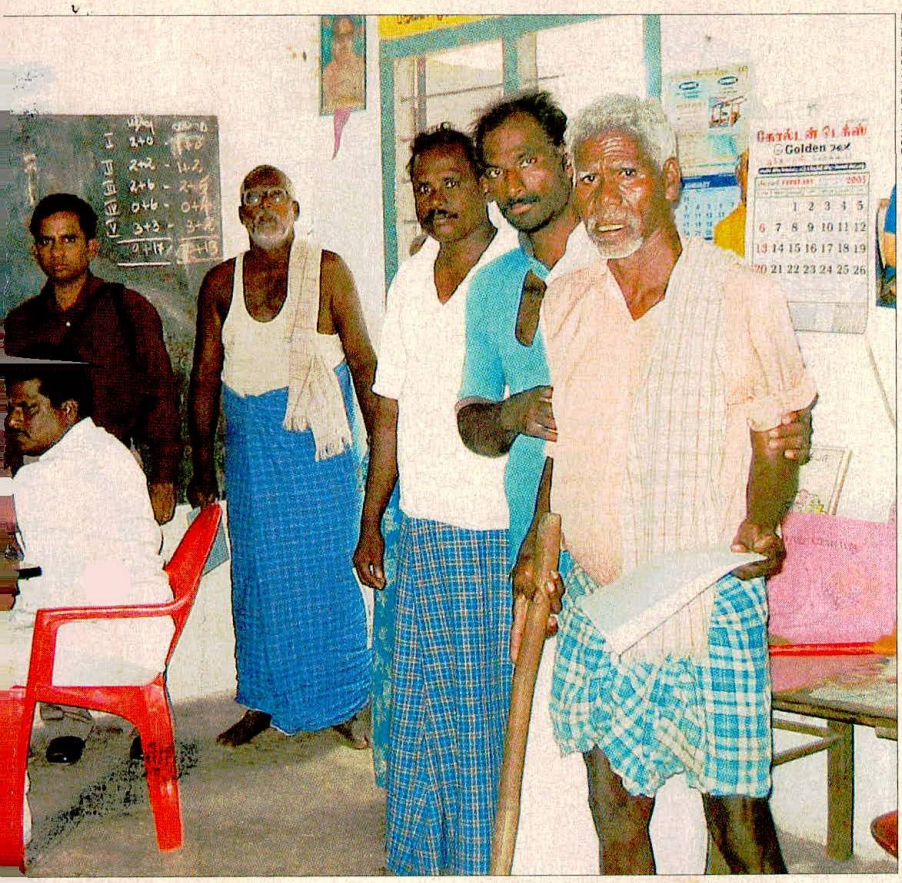
Dassault hopes that the IAF's familiarity with the Mirage will win it the contract. But the MiG Corporation too is thinking on the same lines. Alexey Fedorov, the corporation's director-general, is not worried that the aircraft is still only in the prototype stage. He said: "The MiG-29 M2 has commonalities with the [much heavier, 38-tonne] Su-30MKI. It is more advanced than the Mirage 2000. The avionics and weapons systems will be of Russian, French and Indian origin. With the F-16 too in the fray it will be a stiff competition." Currently, MiG fighters are not designed to be multi-role aircraft. But Fedorov says that the MiG-29M/M2 will make up for this. While the MiG-29M is a single-seater variant, the M2 is the twin-seats trainer version.

Although many aviation experts expressed surprise at the Indian government's decision to ask Lockheed Martin for an RFI, the company takes a different view. Loren E. Timm, deputy, F-16 customer requirements, Lockheed Martin, said: "You can't buy a more cost effective aircraft than the F-16 and we support the programme from cradle to grave. Twenty-four countries are operating them. It has a 72-to-nothing record in air kills and is a true multi-role military aircraft that is capable of day/night, all-weather, air-to-ground, air-to-air, air-to-sea, closed air support and reconnaissance capabilities. If the U.S. State Department allows us to compete in the Indian bid, we will beat the Mirage 2000. We have never lost a competitive bid to Mirage."

The surprise member of the quartet is the JAS-39C Gripen, which is the only truly multi-role aircraft among the four contenders. According to Anders Annerfalk, communications manager of Gripen International, the aircraft is a more modern machine when compared to the others. While it was developed in the late 1980s, all the others date back to the 1970s. The Gripen is powered by the Volvo Aero Corporation RM12 modular power plant, which is based on the General Electric F-404-400 engine.

The four aircraft are currently being evaluated for their operational capabilities in areas such as radars, computers, navigational attack systems, the range of the missile that could be carried, and so on. Other considerations – the kind of technical support and technology transfer that would be given, whether there would be a buy-back arrangement, what advantage the Indian manufacturer (HAL) and the nation as a whole could derive from the deal, whether the manufacturer would be dependable (for technology as well as spares), and whether political compulsions would affect the deal – would also be factored in before a final decision is made. Moreover, the IAF already operates a variety of combat aircraft of both Western (mainly French and British) and Eastern (Russian) origin, each with its own distinct design and operating philosophy. The question is whether inducting a Gripen or an F-16 would further exasperate the situation, leading to increased infrastructural expenses and wastage of time while trying to make them compatible with the IAF's present training methodology, t inventory and maintenance.

Spokespersons of all the companies said that they had replied to the RFI and it was now up to the Indian government to call for request for proposals (RFP). The question is how long the MoD will take before it sets the ball rolling again. Aircraft manufacturers are aware that India took more than two decades before it finally settled for the Hawk as the IAF's Advanced Jet Trainer. Krishnaswamy said: "Yes, we have procurement procedures, but there is no point in taking 15 years to buy/order aircraft which have a 10-year production cycle. In my estimate, only if we quickly procure the 126 aircraft and the LCAs roll off the production line can we hope to maintain our authorised squadron strength." Even assuming a finalisation of the order for multi-role aircraft in the next two to three years, the new fighters are not likely to be part of the IAF's inventory before 2010. ■



BY SPECIAL ARRANGEMENT

from either living related or unrelated donors.

There are no accurate figures for the number of kidney transplants done in India, as there is no national registry for organ transplants in place, a practice that is mandatory in most Western countries where graft procedures are performed routinely. Thus estimates of the number of ESRD [illegible]nts and the actual number of transp[illegible]s performed are at best guesstimates. It is estimated, or rather guesstimated, that fewer than 3,000 transplants are performed in the country each year; this represents a fraction of the total number of patients who require the procedure.

Most parts of India now have hospitals that have facilities to do dialysis (the purification of the blood) and kidney transplantation (grafting of a healthy kidney from a live donor or a cadaver into a patient), and these procedures are carried out with very good results. Unfortunately, the cost is extremely high. Dialysis costs Rs.15,000-20,000 a month, and will have to be continued as long as the patient lives. Over a million people are on dialysis worldwide, 90 per cent of them in the developed world, which accounts for less than 20 per cent of the world population.

Renal transplantation costs Rs.3-3.5 lakhs and requires medicines worth anywhere between Rs.10,000 and Rs.1,00,000 a year to prevent rejection of the transplant and to sustain life.

The per capita income in India is about Rs.21,000. The expenditure on health by the State and Central governments works out to around Rs.400 per capita a year. Thus, India cannot afford to treat people with chronic renal failure. The only feasible option is to prevent the disease, and cost-effectively too. For many patients early diagnosis can be the difference between life and death.

Prevention is a viable option, particularly as half the cases of chronic kidney failure can be avoided just by controlling diabetes and hypertension. For instance, just by controlling hypertension (high blood pressure) kidney failure can be postponed by four years. Constant monitoring and treatment for five years can control hypertension in over 95 per cent of people and diabetes in over 50 per cent, and that too at a cost of Rs.14.23 per capita. This is the focus of the Kidney Help Trust.

DR. MANI set up the Trust in 1996 mainly with donations given by his patients, with five doctors and two persons who had renal patients in their family. The primary aim was to help poor patients meet the expenses of renal transplantation. However, realising that providing free treatment or dialysis to the needy can at best only help a few, the Trust decided to concentrate on the prevention of kidney diseases. This basically meant early detection and treatment of diabetes and hypertension. Says Dr. Mani: "Every effort was made to keep costs down, so that the programme would be affordable by all in India and even in other poor countries."

Says Dr. Manjula Dutta, Head of Epideomology, Tamil Nadu MGR Medical University, who looked after the field work for the Trust as unpaid service during her free time: "Preventive work is actually like shooting in the foot for Dr. Mani as it means reduction in his practice. That a critical care person thought of preventive care is remarkable. But still he wanted to do it as he realised that the bulk of renal failure patients could not afford treatment. I also decided to join him in his mission."

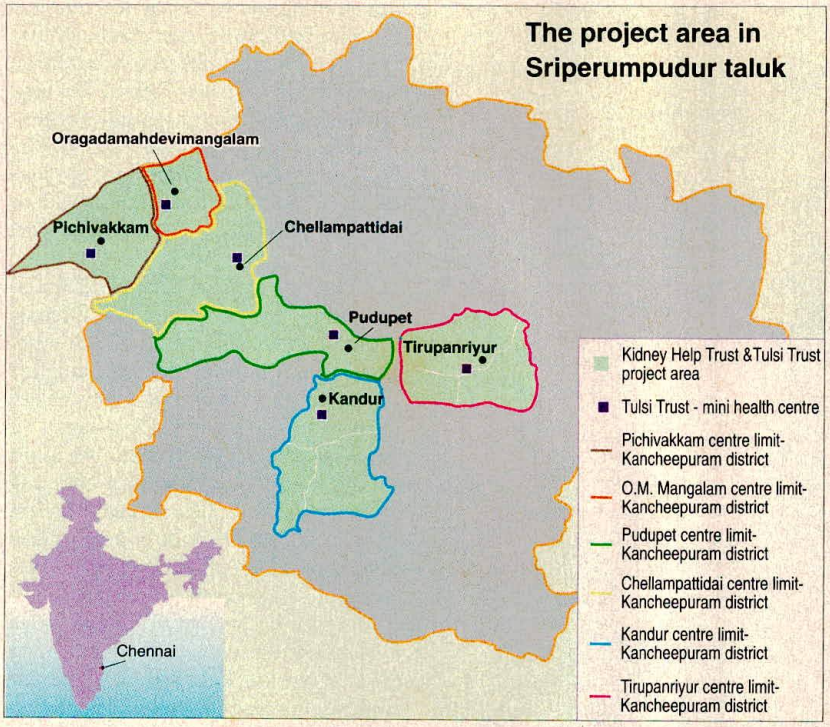
As over 70 per cent of Indians live in rural areas without any facility for or access to health care, the Trust decided to choose a rural area for its out-reach programme. It chose six villages with a total population of 23,000 in Sriperumpudur taluk's Maduramangalur Panchayat Union, an area where trained health workers of the "Tulir Trust" were involved in providing neonatal primary care. The Kidney Help Trust trained Tulir's health workers to do the Sulphosalescetic Acid test to identify albumin in urine and the Bebedix Solution test to check the level of glucose (sugar) in the blood. The health workers were also taught to check blood pressure accurately and to detect symptoms by asking some simple questions during house visits. The demographics of the entire area was mapped and each house was given a card with details of every family member.

The health workers went to every village and invited the people for a check-up at a designated centre – the school, the panchayat office or even the shade of a tree. They went to the homes of those who were unable to come to ensure as near complete a coverage as possible.

That only 30 per cent of those surveyed were aware that they had a problem underlined the importance of screening every member of the community. After diagnosis, 25 per cent of the patients preferred to take treatment with their own doctors. Of the remainder, 79 per cent cooperated for treatment.

Some of the routine steps followed were:

Screening of every person once in 18 months with a simple set of questions to find out if he or she had swelling of the feet, difficulty in breathing, pain on passing uri-



ne, blood in the urine, felt the need to pass urine frequently (more than twice in an hour) or get up from sleep at night to pass urine, or felt pain in the back over the kidney area. A sample of urine was examined at the site for sugar and protein. Diabetics can be usually detected by finding the presence of sugar in the urine; protein leaks into the urine in around 80 per cent of patients with kidney disease. The blood pressure was recorded for all individuals over the age of five.

The second step was verification by the doctors of those who answered any of the questions in the affirmative. A doctor of the Kidney Help Trust examined those with high blood pressure (over 140/90) and those who had sugar or protein in the urine.

Initial investigation was done at the Apollo Hospitals, which agreed to do some simple tests free. The patients were monitored regularly by the doctor for blood urea, serum creatinine, blood glucose and glycated haemoglobin (a test that gives the average of the blood sugar over the preceding three months). Those with evidence of kidney disease were sent to the Apollo Hospitals, where they were investigated and treated free.

Diabetes and hypertension were treated with effective but low-cost drugs, such as glibenclamide and metformin, and reserpine, hydralazine and hydrochlorothiazide respectively, which the Kidney Help Trust provided free. The health workers monitored blood pressure every week and diabetes every three months. The dosage of medicines was adjusted to achieve good control.

Among those who cooperated for the treatment, blood pressure was controlled to ideal levels (less than 140/90) in 96 per cent, glycated haemoglobin was brought to the normal level in 52 per cent and it was significantly improved in another 25 per cent.

THE efficacy of the project was assessed after eight years by extending it to the adjacent areas with a population of around 21,000 and using it as a control group. Screening was done in both areas last year and the findings were compared.

A survey was done to find out the numerical value for the kidney function, GFR. The normal value of the GFR in Indians is between 80 and 95 ml/minute. The GFR was found to be below 80 ml/minute in just 8 per thousand in the project area and in 33 per thousand in the new area, which did not have the benefit of the project over the last eight years. Thus 25 persons had been prevented from developing kidney failure for every 1,000 people, of whom 75 per cent would have developed renal failure.

Says Dr. Manjula Dutta: "The findings hit us hard, particularly since it showed that 70 per cent of those who had kidney disease were not even aware that they had it. Between 7.5 and 10 per cent of the population either had diabetes or hypertension. The gratifying experience was that 90 per cent wanted to be examined. Now the Trust covers 50,000 people in 48 villages."

Funding for the Trust came from a number of individual and corporate donors. The total cost of the project, including the salaries of the workers and the doctors, the transport of doctors from Chennai to the project area, chemicals for the urine tests, and all the medicines used, worked out to just Rs.14.23 per capita a year. This does not take into account the tests done at the Apollo Hospitals, which were free (but this could add up to another couple of rupees per person).

Says Dr. Mani: "We believe we have established and validated a simple and effective protocol for the prevention of a large proportion of kidney failure at a very low cost. We have not measured the impact of the incidence of stroke and heart disease, which would probably be even greater than the benefits to the kidneys."

This programme can be replicated easily for small groups and even taken up by members of the community with a little help from doctors and laboratories. It can also be incorporated easily into government health programmes using the [redacted] staff.

Dr. Jan J. Weening, president, [redacted] tional Society of Nephrology (ISN); Dr. John Dirks, chairman, ISN's Commission for the Global Advancement of Nephrology and Professor Emeritus of Medicine at Toronto University, visited the project site and were convinced that the model should be replicated. Dr. Weening said the protocol would serve as a paradigm for the rest of the world. Dr. Dirks said it was particularly important as, according to projections, there would be 350 million diabetics in another two decades. And, of them, 50 million will be in India. "These are silent diseases that creep up on one and have [redacted] astating effects."

Talking about why it was important to screen large populations, Dr. Weening said it was not possible to detect a small vessel disease in one's brain or heart. "The first time you notice it is when the patient develops a stroke.... If you want to pick up those patients early, you cannot pick them up by looking at the brain or the heart, but you can pick them up by looking at the urine. You will find small traces of protein there.... If it is found at an early stage, then the patients can be treated."

Dr. Weening said the programme had drawn considerable international attention from the research papers that Dr. Mani had published in international journals. The study would have a tremendous impact in bringing down cases of stroke and heart failure and not just chronic kidney disease. It is a model worth replicating throughout the world. ■

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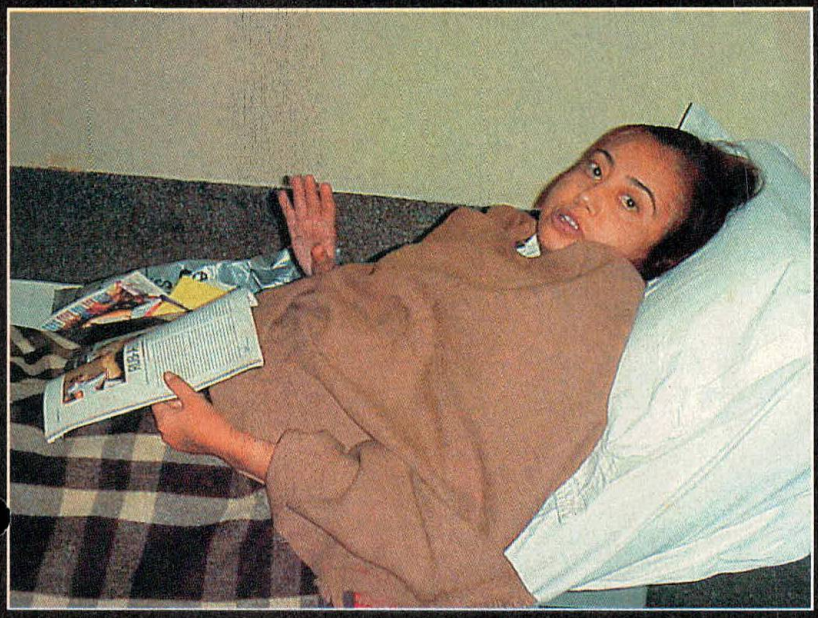
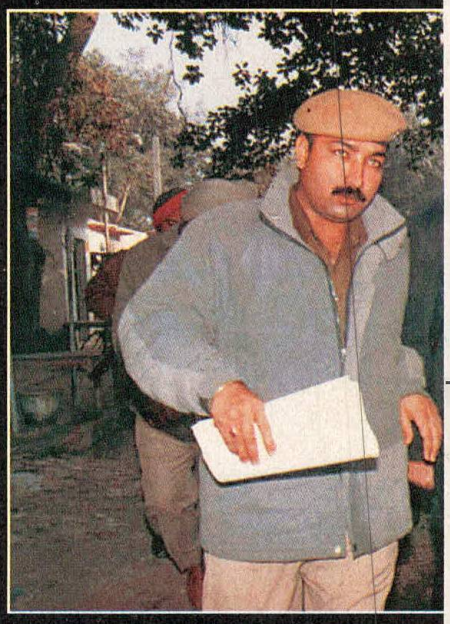
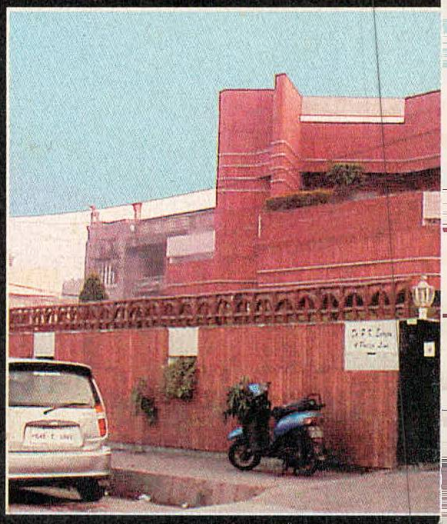






IGNOBLE PROFESSION: (Clockwise from above) A patient at Kakkar hospital awaiting kidney transplant; Sareen being arrested; Sareen's residence

MERCENARY SCALPEL

The organ trade of Amritsar thrived on deceit and secrecy

By VIJAYA PUSHKARNA

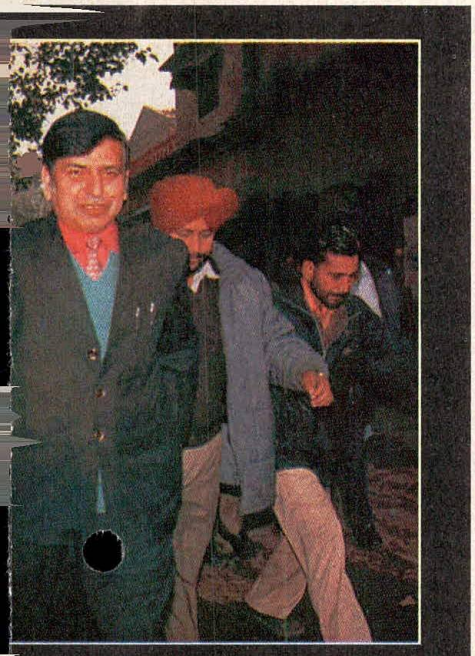
Guridal Singh's problem was simple. He had been promised Rs 5 lakh for his kidney, but was paid only Rs 45,000. He had complained to the police, but to no avail. Singh finally landed up at the portals of the Punjab Human Rights Organisation (PHRO). Little did he know that he was about to hand over the key to a major scam.

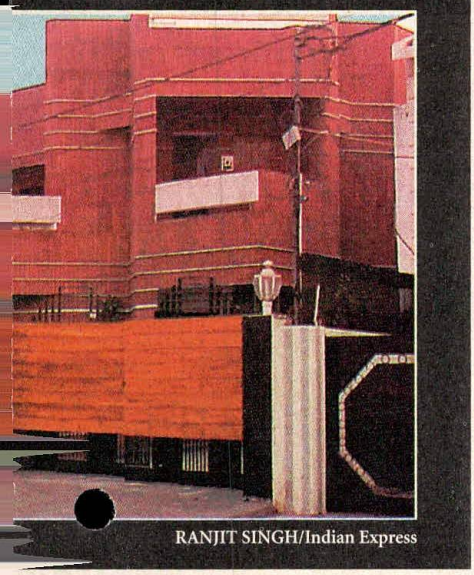
Retired judge A.S. Bains, chairman of PHRO, decided to follow it up. The probe unearthed a huge kidney transplant racket, involving medical malpractice, organ trade, political nexus, death and disappearance, and cheating.

The scam's epicentre was the holy city of Amritsar, where surgeon Praveen Kumar Sareen 'ripped off' kidneys of illiterate poor, mainly migrants from Uttar Pradesh and Bihar, and transplanted them on rich patients. Dr O.P. Mahajan, principal of the Government Medical College, Amritsar, cleared the cases, and a clutch of other doctors aided and abetted the crime inside Kakkar Hospital. Middlemen of the trade spread far and wide and trapped unsuspecting people into parting with a kidney. Often, the promised sum was not paid.

A special investigation team under senior police officer A.A. Siddiqui is probing the murky affair. Says he: "It was organised crime. Kidneys were removed and sold and money passed hands. All the clauses of the transplant act were violated."

The affidavits signed by donors and recipients were full of false information regarding addresses and the relationship between the donor and the recipient. If the affidavits are to be believed, most of the donors were servants of the recipients, and it was "love and affection" for the employer that made them part with their





RANJIT SINGH/Indian Express

kidneys.

The 'servants' were put up in shabby shacks, virtually in captivity, till the surgery, and thereafter sent out on to the streets. That is, if they did not die on the surgeon's table. When a few died, the bodies were allegedly cremated as unclaimed. As was expected, the special investigation team found none of these 'servants' at the houses of the recipients, their alleged 'masters'.

Gurvinder Singh, a donor, told investigators that he was kidnapped and held in captivity for two months. He lost consciousness one day and when he regained it, he was without a kidney. The doctors amassed wealth, with Sareen having done two transplants every three days in the last two years; the rich got a kidney and a chance to live.

Some non-resident Punjabi doctors also allegedly sent patients from the UK and the US for kidney transplants. The greater the need for the kidney, the more they paid the doctors, who in turn persuaded the poor donors to part with the organ for a song.

The issue is now becoming political. Punjab Chief Minister Captain Amarinder Singh appears to have got the second scam (the Punjab PSC scam was the first) in which he alleges the connivance of his predecessor Parkash Singh Badal.

The chief minister said about 300 labourers had lost their kidneys. Though the investigators are yet to come up with a final figure, the chief minister said that 20-25 people might have lost their lives. It has been alleged that Sareen paid Rs 50 lakh to Badal for the Majitha byelection in 2001.

Not a single recipient has been arrested so far. The special investigation team figures that Sareen ensured VIP recommendations for every recipient so that his illegal enterprise was secure, politically. Many donors, on the other hand, are behind bars for selling their kidneys.

According to Justice Bains, Sareen's name figures in most of the cases registered by the police, along with those of the donors. The names of recipients, who paid hefty fees, are nowhere mentioned.

Bains also has evidence that certain hospitals and some doctors from around the country had referred kidney patients to Kakkar Hospital, telling them that a transplant would cost Rs 5 lakh.

Countless innocent migrants from Uttar Pradesh and Bihar, who came to Punjab with the hope of having a better life, have been cheated in the scam.

Sareen and Mahajan have been arrested. They are, however, getting support from the medical fraternity. The issue is slowly turning out to be a battle between doctors and the police, with the local branch of the Indian Medical Association deciding to boycott patients from the police department.

Sareen has been trying to justify what he has been doing. In an article he wrote in a medical journal, he says that it may be more ethical to perform a paid renal transplantation from a voluntary unrelated renal donor than from a related donor or a spouse, under family pressure.

Medically, however, preference is given to a related donor, the world over. It could be that of a sibling or a parent or a child. When kidneys of relatives are not available, most institutes prefer to wait for a cadaver kidney, rather than deprive a healthy person of a kidney. "We cannot be sure that it will help the patient," says a senior nephrologist.

The issue has become a battle between doctors and cops, with the doctors deciding to boycott patients from the police department.

Interestingly, the Chandigarh-based Post Graduate Institute of Medical Education and Research, a premier hospital, has done very few kidney transplants in the last few years.

Many years ago, the institute organised a sports meet of renal transplant patients to demonstrate that donors and recipients could lead a normal life. The participants were mainly people who had given kidneys to their sons, brothers and other relatives. The annual event was soon given up and the hospital virtually stopped transplant surgeries and started campaigning for cadaver kidney transplant. The reason, according to a senior doctor, was the death of a donor on the operating table.

But in Amritsar's Kakkar Hospital, the death of several donors appears not to have mattered, possibly because they were nobodies. ■

Paying the piper

D-Company suffers yet another jolt as Sharad Shetty is killed in Dubai

By DNYANESH JATHAR & QUAIED NAJMI

Vengeance is mine'. Chhota Rajan may not have said it in so many words but the Mumbai don is out to make rival Dawood Ibrahim and company pay for their mistake of mounting an unsuccessful attempt on his life in Bangkok, three years ago. On January 19, Rajan cut off Dawood's right hand when his button men gunned down Dubai-based Sharad Shetty, who had kept his boss posted about Rajan's movements prior to the Bangkok operation.

Shetty, head of the Rami Group which owns the Regent Palace and Regal hotels in Dubai, was gunned down at the lounge of the India Club, a popular hangout of Indian businessmen. As he walked in around 9 p.m. (10.30 p.m. IST) to attend a dinner, he was confronted by two nattily dressed youth in their mid-30s. Before Shetty, 45, could react, they pumped bullets into his chest and head from point-blank range.

The police were immediately called in but the assailants had by then melted into the darkness outside. Two hours later, Shetty's wife Shashikala, who witnessed the shooting, was escorted home. Shetty's children—daughters Swayam and Shraddha and son Sandeep—were told about the incident only later.

The shootout bore the stamp of the underworld and shocked the expatriate Indian community, especially the businessmen among whom Shetty was popular. It also angered the Dubai Police. The hugely popular Dubai Shopping Festival was underway and the bloodletting could not have come at a worse time. "We will act tough with those who could be a source of trouble," said Major-General Dhahi Khalfan Tamim, chief of Dubai Police. "The murder should be an eye-opener and it should encourage us to review our visa and investment policies. We should not allow people with a criminal background to stay amid us."

His concern is not without reason. Dubai desperately wants to avoid the tag of being a playground of criminals from the subcontinent, specially in view of Uncle Sam's war on terror.

The revenge trail

Munna Jhingada: Led the team of sharpshooters in Bangkok. Now in Karachi.
Vinod Shetty: Mumbai hotelier who spied on Rajan. Killed in Mumbai in 2001.
O.P. Singh: Maintained contacts with Sharad Shetty. Killed last year in Mumbai.
Sunil Soans alias Sunil Florist: Helped Vinod Shetty. Killed last year in Mumbai.
Guru Satam: Helped Vinod track Rajan. Now possibly in Malaysia.
Sharad Shetty: Coordinated intelligence against Rajan. Killed in Dubai on January 19.

Meanwhile, India Club, formerly known as India Sports Club, has been accused of accepting members without checking their antecedents. When asked whether the club would review its membership policy, its secretary refused to respond.

It will take a while for Dawood to recover from the loss of Shetty, w' hailed from Dakshina Kanna district in Karnataka. Their friendship goes back a long way. Senior Inspector Pradeep Shinde of the Mumbai Police crime branch said the two met in the late 1970s when Dawood was still making his mark in the underworld. Shetty was then running a modest jewellery shop in Jogeshwari, a communally sensitive pocket of north-western Mumbai. In those days, Dawood was mainly dealing in smuggled gold, and the friendship was mutually beneficial.

"Gold consignments used to be dumped in airport dustbins, to be picked up later by sweepers on Dawood's payroll," said Shinde. "It would then be routed to Shetty." In 1983, the duo was arrested by the