

Guest Editorial

Organ Donation: Lighting Lives of Needy

Organ donation is an extremely noble deed that all of us are empowered to carry out irrespective of the social, academic, and religious strata that we are from and this single act of benevolence can lead to adding years of life to many. Imagine this step forward can be the decisive change for so many lives around us who are yearning to spend few more productive years.

The history of organ transplant goes back to 1954 when on December 23, the first successful living-related kidney transplant was done, which was led by Dr Joseph Murray and Dr David Hume at Brigham Hospital in Boston, wherein a kidney was transplanted from Ronald Herrick into his identical twin, Richard. In 1963, the first successful lung transplant, led by Dr James Hardy at the University of Mississippi Medical Center in Jackson, was carried out. In 1966, the first successful pancreas/kidney transplant led by Drs Richard Lillehei and William Kelly at the University of Minnesota in Minneapolis was carried out. In 1967, the first successful liver transplant led by Dr Thomas Starzl at the University of Colorado in Denver was carried out. Also in 1967, the first successful heart transplant led by Dr Christiaan Barnard at Groote Schuur Hospital in Cape Town, South Africa was done.

In India, I had the honor of being one of the pioneers to carry out heart transplant. Before 1994, the only way to get a heart transplant for Indians was to go abroad which was not affordable by many.

After the Transplantation of Human Organs Bill finally received the President's assent on 7 July 1994, we performed India's first heart transplant at the All India Institute of Medical Sciences (AIIMS) on 3rd August the same year.

It was a landmark legislation to regulate the removal, storage, and transplant of human organs. I still remember Devi Ram, a 40-year-old heavy industry worker suffering from cardiomyopathy, had been admitted in AIIMS for 3 months. The patient belonged to the AB+ blood group, a universal recipient blood group. It was a critical situation of "Do or Die" and heart transplant was the only way ahead that we could offer to him. Providentially, a 35-year-old lady who had suffered brain hemorrhage was brought into the hospital and her family agreed for the heart transplant. Devi Ram also got convinced and the rest as they say is history for Indian transplantation scenario. On 3rd August 1994, in a 59-min procedure, a team of 20 surgeons who were guided by me conducted the successful heart transplant surgery. Devi Ram lived on for 15 more years until he died of unrelated brain hemorrhage. That was the opening chapter of a long saga that organ transplantation has gone through in our country.

India is a country where by virtue of its size of population the demand of health care is always a challenge. To add to it, its diverse religions and cultural ethos also adds constraint to any new procedure, i.e., to be introduced. More so when it comes to the terminally ill and death the emotional issues outweigh any rational and scientific thinking. Scientific studies have proven that in Europe, Baptists approved of this method more often than persons of other religions. In Indian context also it is difficult to motivate people as they feel that the body should not be tampered with. Religious and cultural traditions may be the major determinant preventing Asians from donating organs. However, it is time that religious heads make a more concerted effort toward this noble endeavor.

Presently, India is struggling with acute shortage of organs. At least 15 patients die every day waiting for organs and every 10 minutes a new name is added to this waiting list. Undoubtedly, the demand far outstrips the availability of organs. In India, less than 5000 kidney transplants are carried out annually against an estimated requirement of over 175,000. The rate of organ donation, on the contrary, is as low as 0.34 per million population.

In our country, the enactment of the Transplantation of Human Organ Act 1994 was a major milestone. It provides for the regulation of removal, storage, and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs. It defines transplantation as a means of grafting any human organs from any living person or deceased person to some other living person for therapeutic purposes.

In 2014, the government implemented Transplantation of Human Organs and Tissues Rules, 2014. These rules override Transplantation of Human Organs Rules, 1995, with certain exceptions.

The government on its part has taken the step forward by establishing the National Organ and Tissue Transplant Organization set up under Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. It can be accessed at notto.nic.in. This web site enlists various guidelines and highlights the government's



vision. Patients need to register there and would be given an organ depending on availability regardless of their financial or social status.

The enrollment can be done online on a common portal which is accessible to all the hospitals such that when every potential case of brain death or head trauma, i.e., that is recorded, the authorities can look up if the given person has ever registered himself/herself as an organ donor.

For eye donation there should be a law that any person who dies, it will be presumed that he has given consent for removal of eyes unless he has given in writing that his eyes should not be removed. It will fulfill requirement of eyes for the needy in a huge country like ours.

Along with all these systems in place there are various challenges, which one has to counter, notably amidst it in India are Kidney marriages. Government on its part is trying hard to put the processes in place but alas the need supply mismatch has become a ready source of commercial opportunity for many. In recent past, the Mumbai police have arrested senior doctors from a renowned corporate hospital in connection with a racket in kidney sales. Even in national capital, a similar racket has been unearthed in one of the leading corporate hospitals. These are the tip of iceberg in a country huge as ours, where the health sector is dominated by private players and out of pocket expenditure is the main stay of health care delivery. All of us are to be blamed as the existing rules have so many loopholes that misuse of it is a commonality rather than rarity. The presence of a growing middle class, the lack of a national health insurance scheme, and attractive business proposition for some and a solution for others is leading to unethical practices. In many affordable middle class or upper class families, even when there are relatives in good health who can donate, there is hesitation in undergoing the process and they tend to opt for the commercial route. Organ trade in India has also assumed huge commercial dimensions. It relates to the exploitation of the poor in form of money or other benefits.

It is time that focused effort needs to be put in not only by the government but also by the medical fraternity and nongovernmental organizations. It is heartening to note that various agencies of government unite at the time of need and Green Corridors, which are a special route, where all the street signals between the hospital where the organ is harvested and the hospital where it is to be transplanted are manually controlled and the vehicle transporting the organ is given a traffic-free passage. Sometimes, organs are available only in other cities, in which case they are airlifted. Efforts should be streamlined and government should encourage it. The other steps which can take this process ahead is spreading awareness and its relevance to the deep interior rural populace and opening satellite centers for convincing and allowing people to make informed decisions. Awareness drive should focus in schools and teaching institutes where the younger generation can imbibe the relevance of organ donation. Fleet of helicopter ambulances should be ear marked and the effort can materialize by public--private partnerships and corporate social responsibility. It is also important that digitization of various nodal centers should be done. There is an urgent need for networking amongst identified nodal hospitals and centers across the country for organ harvesting and sharing for optimal utilization of this scarce resource which can be gainfully utilized. Most important of the lot is changing the thought process of society to usher in an era of scientific and ethical utilization of human organs.

Prof P Venugopal

Ex-Director, AIIMS, New Delhi
Sr. Consultant and Chief Cardiac Surgeon
St. Stephen Hospital, D.L.F. Phase-III
Gurgaon, Haryana, India