## ORGAN TRANSPLANTATION IN BANGLADESH – CHALLENGES AND OPPORTUNITIES

Organ transplantation is one of the greatest achievements of medical science in the 21st century. It is a life saving therapy for organ failure. Organ transplantation has granted a sustained improved quality of normal or near normal life to people suffering from organ failure. The improvement in organ transplantation over the years is due to improved technology, understanding of rejection, discovery of newer immune suppressant drugs and advancement of medical management.

Organs that can be transplanted are the heart, kidneys, eyes, liver, lungs, pancreas, intestine and thymus. Transplantable tissues and cells include bones, tendons, cornea, bone marrow, skin, heart valves, veins and islet cells of pancreas. Worldwide, the kidneys are the most commonly transplanted organs followed by liver and the heart.

Transplantation medicine still now is one of the most challenging and complex areas of modern medicine. One of the key problems is transplant rejection. Rejection can be reduced through stereotyping to determine the most appropriate donor-recipient match and through the use of immunosuppressant drugs. The introduction of cyclosporine and new generations immunosuppressive drugs, have altered transplants from research surgery to life saving treatment. The rising success rates of transplants due to modern immunosuppressive agents have made transplants more flourishing.

Organ transplantation in Bangladesh is emerging steadily, but still in its budding stage of development. Cornea transplantation began as early as 1974. Despite massive public awareness campaign extending over 3 decades about cornea donation countering the false perceptions in the society, to-date only about 150-175 cornea transplants are done every year in four centres at Dhaka. The first successful kidney transplantation was done at the then Institute of Postgraduate Medicine & Research (now Bangladesh Sheikh Mujib Medical University) in October 1982 and thereafter regular kidney transplantation from 'living donor' donations of close relatives only has been continuing since 1988. Only around 1000 patients had kidney transplantation within the country since then. However, demand for kidney transplants far outstrips the number of available organ donors. It is estimated that only 130 patients (of end stage renal failure requiring kidney transplant) on average can manage donors to undergo kidney transplant against the annual demand of estimated 5000. More recently, the first successful liver transplantation of the country was done in June 2010 at BIRDEM Hospital, followed by yet another successful transplant in August 2011 in the same Institute.

Meanwhile, Bangladesh Organ Transplant & Donaction Act, 1999 was passed in parliament, allowing two types of organ donation – 'living donor' donation from close relatives and 'deceased or cadaveric' donation. However 'deceased donation' transplants where organs are removed surgically from consented donors shortly after death or during brain death while in ICUs could not be started as yet in Bangladesh.

Presently, organ transplantation (kiney & liver) are done from 'living donor' donation of close relatives only. The law does not permit selling organs or taking organs from living strangers. However, recent media reports suggest that many of the organ transplants are happening through commercial dealings, raising debate on ethical issues. Unfortunately the debate produced negative impact on public awareness about organ donation and virtually put the organ transplantation in the country on hold. Patients desperately in need of life saving transplants are either dying or suffering excruciating pain and hoping perhaps against hope that someone in the family will make enormous personal sacrifice to donate organ; or are leaving the country if they can afford in search for a commercial donor and a transplant abroad.

Lack of awareness, social, mental and religious barriers and superstitions are main obstacles for organ donation. To overcome acute shortage of 'living organ donor from close relatives', 'deceased donor transplant' as approved by law should be started and promoted. However, for such 'posthumous organ donation', massive co-ordinated awareness programmes will be needed. Such programmes should specifically aim to eliminate social, mental and religious barriers and superstitions, besides targeted appeal like 'Donate Organs, Save Live' etc. Government, Non-Govt organization, media, public representations, opinion leaders, religious Imams – all should work together to make the 'organ donation awareness campaign' a success. Government may constitute a 'National Coordination committee' comprising all stakeholders to monitor the organ donation and transplant related activities.

Transplant facilities must also be started in the Government Hospitals so that common people get its benefit. More transplant centers should be started in the private hospitals so that all types of transplants will be easily available with affordable cost within the country. Infact, development of 'multi-organs transplant centres' will be our ultimate goal. An organized training programme is needed to create manpower in this sector. Drugs should be available at cheaper cost as well. Organ transplantation is a milestone of health care of a nation. Every nation is advancing in organ transplant for offering new life and survival benefit to their own nationals. Bangladesh cannot afford to lack behind.

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