Ethical Consideration in Organ Transplantation

Saima Abid

This article may be cited as: Abid S. Ethical Consideration in Organ Transplantation. JSMC 2019;9(1):145-6.

Joseph Murray carried out the first successful human kidney transplant in December 23, 1954.[1]. Since then organ transplant has been a successful practice all over the world. WHO data of 2008 from 104 countries showed that approximately 100,800 organ transplants are carried out every year all over the world, comprising of total 69400 kidney, 20200 liver, 5400 heart, 3400 lung and 2400 pancreatic transplants[2]. Access to transplantation is determined by the healthcare structures, access, socio-economic status and cultural factors [3-4]. Asia has the lowest rates of organ transplant, during 2014 organ transplantation rate of South East Asia was as low as 3.8 patients per million population [5]. Pakistan with population of 20081 million has an estimated end-stage renal disease prevalence rate of 100 per million population while its transplant rate is 810 cases per million population [6]. Currently Global observatory on donation and transplantation estimated that during 2016 Pakistan performed 1,092 (5.66) transplants as compared to 121,129 (28.73) globally. Out of the total, 915 were kidney and 177 were liver transplants.[7] 20 public and 23 private sector institutes are recognized by the government to perform human organ transplant in Pakistan presently. [8] Renal transplantations were started in Pakistan during 1979. Rate of transplant gradually increased from less than 50 cases to more than 100 cases during 1990s [9] Since 2000, the number of organ transplants have increased to tenfold per year. During the year 2005, Pakistan beat the world for "Transplant Tourism" when approximately 1500 non-citizens were provided with Transplantation services [10]. More than 70% of the transplants were carried out illegally from organ donation by poor commercial donors on inadequate payment of 1500 to 2000 dollars [11,12].

Unfortunately, Transplant tourism developments continued till 2007. After realizing the gravity of the problem, Government decided to standardize transplantation mechanisms through Pakistan and Human Organ Transplant Authority (HOTA) Ordinance in September 2007; followed by (HOTA) Act on 18th March, 2010, revised on 16th July, 2012. After 18th amendment [13] in the constitution, all the provinces were bound to establish their own Transplantation Authorities, therefore, in 2014 the Provincial Assembly of Khyber Pakhtunkhwa (KP) enacted the "KP Medical Transplantation Regulatory Authority (MTRA) Act[14].

Prominent Features of the Law:

The law describes that the live donor who is eighteen years or above and citizen of the country can voluntarily donate any organs of his body for therapeutic purpose to any other genetically related individual. In case of non-availability of the donor the Transplant Evaluation Committee (TEC) will be deciding authority.

Any person who wants to donate his organs or tissues after his demise, can in writing duly signed and verified by the TEC, in the presence of two witnesses can authorize any recognized medical institute. On the death of such donor a close relative shall inform the TEC to permit the removal of organ or tissue accordingly.

Unclaimed brain dead hospitalized patients shall be presented to the TEC for transplantation, after search for their relatives within 24 hours. Human organ shall be collected for transplantation from such patients with no prior consent after evaluation by the TEC, in case of availability through informed consent by close blood relative. In all cases transplant will only be carried out by certified recognized professionals and institutions.

To curb transplantation Tourism, organ donations by the citizens to non- citizens is strictly prohibited except in special cases. This act forbids non therapeutic, uninformed removal of the organs and guilty will be sentenced to the prison with considerable fine.

Correspondence:
Dr. Saima Abid
President Public Health Association KP & Merged Districts, Associate Professor Community Medicine.

Received: December 23rd 2018, Accepted: February 28th 2019

Furthermore, any registered physician etc. found guilty shall be reported to the Pakistan Medical and Dental Council to cancel his registration. There will be punishments for personals involved in commercial dealings of human organs and they will be imprisoned with heavy fine. Those who break any provisions of the Act shall be sentenced to prison with or without fine. Anyone whose Company is involved in the offence shall be held and will be punished accordingly. Cases under this Act will be dealt by court of first class Magistrate or above.

After commencement of the law, Government of KP constituted the KP Medical Transplantation Regulatory Authority (MTRA) and constituted TMC at Peshawar during 2016. MTRA has Health Minister as chair and other specialists as members to control and monitor all organ transplantations. Various committees will be constituted under MTRA (i.e. Transplant Evaluation Committee, Transplant Monitoring Committee, Transplant Inquiry Committee, Transplant Ethical Regulatory Committee) to ensure strict compliance to the safe and ethical transplantations both for the donor and recipient. These will address any religious, cultural, ethical issues or breach of the act. Development of pool of voluntary donors, recipients and transplantation registry; networks for quality control will be the responsibility of the MATRA.

KP MTRA RULES are developed by the Government of KP by the end of 2017 (15). All of these efforts are believed to have a positive impact on ethical considerations of the organ transplantation.

Hospitals/ Institutes registered with MATRA- Kp: So far institute of Kidney Diseases (IKD) Hayatabad, Rehman Medical Institute (RMI) Hayatabad and North West General Hospital (NWGH) Hayatabad are the Institutes that are given Provisional Registration of MTRA-KP for Renal Transplantations. While Pakistan Institute of Community Ophthalmology (PICO-MTI-HMC) Hayatabad, Khyber Teaching Hospital (MTI-KTH) Peshawar, Lady Reading Hospital (MTI-LRH), Rehman Medical Institute (RMI) Hayatabad and Kuwait Teaching Hospital (PMC) Peshawar are given Provisional Registration with MTRA-KP for Corneal Transplantations.

The population with end stage organ failure is increasing worldwide but according to World Health Organization only 10% of those who require organ transplantation are actually receiving them (16). Donor shortage is a worldwide public health challenge and call for organ donors is justified but this has to be coupled with strict implementation of ethical considerations, and KP has taken the first steps towards this goal. Diseased organ donation program is the one that can be helpful in overcoming this problem and MTRA-KP is working on it.

REFERENCES

1. Merrill JP, Murray JE, Harrison JH, Guild WR. Successful homotransplantation of the human kidney between identical twins. Journal of the American Medical Association. 1956 Jan 28;160(4):277-82.
2. WHO;Transplantation;GKT1 Activity & Practices; 2018; https://www.who.int/transplantation/gkt/statistics/ en/
3. Gordon EJ, Ladner DP, Caicedo JC, Franklin J.Semin Nephrol; Disparities in kidney transplant outcomes: a review. 2010 Jan; 30(1):81-9.[PubMed]
4. Mahillo, Beatriz Carmona, Mar etal ; Worldwide distribution of solid organ transplantation and access of population to those practices Transplantation: July 2018 - Volume 102 - Issue - p S71S72
5. Organ Donation and Transplantation Activities 2014. The Global Observatory on Donation and Transplantation (GODT) Data. The WHO-ONT Collaboration; (2016). Available from: http://www.transplant-observatory.org/data-reports-2014/ [Ref list]
6. Rizvi SA, Naqvi SA, Hussain Z, Hashmi A, Akhtar F, Hussain M, Ahmed E, Zafar MN, Hafiz S, Muzaffar R, Jawad F. Renal transplantation in developing countries. Kidney International. 2003 Feb 1;63:S96-100.
7. Global observatory on donation and transplantation; http://www.transplant-observatory.org/summary/
8. Mukhtar Alam; DAWN NEWS KARACHI: Over 250 kidney Transplants performed in one year ; November 03, 2008; https://www.dawn.com/news/328247
9. Rizvi, S.A., Naqvi, S.A. and Zafar, M.N., 2002. Renal transplantation in Pakistan. Clinical transplants, pp.191-200.
10. Pakistan being dubbed cheap kidney bazaar. [accessed 29 August, 2008]. Available at www.dailytimes.com.pk/default.asp?page=2006%5C04%5C16%5Cstory_16-4-2006_pg7_6
11. Renal transplantation in Pakistan. Rizvi SA, Naqvi SA, Zafar MN. Clin Transpl. 2002; ():191-200.[PubMed]
12. Garwood P. Dilemma over live - donor transplantation. Bulletin of the World Health Organization : 2007; 85: 5-6.
13. http://www.punjablaws.gov.pk/laws/2428a.html
14. Http://kpcode.kp.gov.pk/uploads/2014_11_THE_KHYBER_PAKHTUNKHWA_MEDICAL_TRANSPLANTATION_REGULATORY_AUTHORITY_ACT_2014.pdf
15. Http://www.healthkp.gov.pk/wp-content/uploads/2017/10/Medical-Transplantation-Regulatory-Authority-Rules-2017.pdf
16. Keeping kidneys. Bull World Health Organ. 2012 Oct 1; 90(10):718-9. Https://www.who.int/bulletin/volumes/90/10/12-021012/en/ [PubMed]