

# Ethical Issues in Renal Transplantation in Developing Countries

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The 1950s saw the beginning of renal transplantation -the first among solid organs. To date more than 250,000 have been carried out around the world, the majority in affluent nations<sup>1,2</sup>. Since then, transplantation activity, including other solid organs as heart, lungs, liver, pancreas etc. has proliferated in these regions. In comparison, transplantation has not made much progress in developing countries, often being limited to renal transplants. Because four fifths of the world's population belongs to the underdeveloped areas, the need for transplantation in these countries is therefore greater. However, transplantation activity and economic prosperity are closely linked; the transplantation rate in developed countries ranges from 20-40 per million population (pmp) compared to 1-5 pmp in the developing countries.

Compared to dialysis, a successful renal transplant is more cost- effective in the long run and offers a better quality of life and rehabilitation to patients. Unfortunately poverty and lack of awareness about the benefits of transplantation coupled with poor economic resources and few adequately trained professionals all prevent poorer societies from grasping these far-reaching benefits of science and technology. Moreover, the limited resources available, these are often channeled into the eradication of communicable diseases and addressing basic public health issues such as availability of potable water supply and sewage disposal.

Medical ethics dictate that a physician must be free to use a new therapeutic method if he believes it to offer the hope of saving a life, restoring health or relieving patient suffering. This is particularly relevant to transplantation because of the immediate and often dramatic benefits of this technology. Moreover, no branch of medicine is so dependent on public participation (recipients and donors) as is transplantation, but whereas the successes of transplantation have caused it to grow rapidly in scope as well as numbers, it has also brought with it many ethical issues which need to be addressed continually by the society. The more powerful concept of ethics is based on utility, aimed at achieving the greatest good for the greatest number of individuals. Sometimes the transplant surgeon is torn between the contradiction of his obligation to the individual patient versus the public policy of general good to all. In such situations public opinion remains the final arbiter as acquiescence of the community is essential.

## **Ethical Issues**

### **Donors for renal transplantation are from three sources:**

i) Living related, ii) living non-related, iii) cadaver.

In the affluent societies of the west, the majority of kidneys are obtained from cadavers-heart-beating, brain-dead individuals; and this practice takes place under the umbrella of proper laws. In the developing nations however, laws penning cadaver organ retrieval do not exist universally. Even in countries with supportive brain death laws, societies are often not geared towards accepting this form of donation, while the absence of cadaver laws in other countries means that living donors account for renal transplants that take place in these underprivileged nations. This situation has resulted in several donor issues that need to be addressed under the heading of Ethics.

### **Donor Issues in Living Related Renal Transplantation**

The first important ethical issue to be addressed is that of informed consent. The removal of kidneys from healthy persons is of no benefit to the donor, other than, perhaps enhancing their self esteem<sup>3</sup>. Donor nephrectomy is not without risk to the patient's life (less than 1% mortality in 8,000 kidneys transplants)<sup>2</sup> and this fact has to be clarified well before a person becomes a donor. Although long-

term results have not become. Out significant ill effects of urnephrectomy i.e., hypertension, it is mandatory to inform the potential donor about the long term effects of donation. Another contentious issue is to examine if excessive pressure has been applied to be a donor even though donation is interfamilial. This is sometimes true in cases of female donors, particularly unmarried girls, in a male dominated society - a not too uncommon situation in the developing countries<sup>4</sup>. Therefore, the adequacy of informed consent is sometimes suspected in cases of living related donor transplantation, because donors are being treated as mere objects.

Altruism, both spousal and between close friends also fall into the category of living donor transplantation, Coercion has to be excluded in such situations as it is generally seen that such transplants are without commercial motives and are generated by genuine desire to help a needy patient.

### **Donor Issues in Living Non Related Renal Transplantation**

Guttman has reported that in China a large number of donor kidneys (up to 90%) come from executed criminals<sup>5</sup>. Condemned prisoners were being subjected to blood tests for purposes of transplantation without their consent and were being informed of the decision of the punishment only hours before the time of execution. The representatives of the Chinese Government have clarified that transplant operations were done with the consent of the individual. However, there are sufficient reasons to believe that informed consent of the individual may not be possible in such situations and therefore, the practice is against established principles of ethics and justice.

### **Commerce in Human Kidneys**

There is no ethical issue in transplantation that stirs up more controversy than obtaining kidneys from unrelated living persons. The guidelines of the Transplantation Society in 1985<sup>6</sup> and the guiding principles of the World Health Organization (WHO) in 1991<sup>7</sup> regarding unrelated donor renal transplantation are very clear on the subject of commerce: altruism should be the prime motive for transplantation and payment made towards donation by the recipient or any agency on their behalf is not possible. These principles prohibit potential donors and recipients from indulging in such activities while the transplant teams were also made responsible so as not to become a party to commercialism. Understandably, this was done with the purpose of prohibiting trade in kidneys so that it would not grow into a human 'flesh-market'. The growth of paid organ transplants from unrelated donors in India was exponential (from 200 in 1984 to over 4,000 in 1994)<sup>9</sup> drawing patients from other regions of the world especially the Middle East and South Asia. There was also a real danger that later on, partial or segmental organs such as livers, lungs and pancreas could become engulfed in this trade, leading to further exploitation of the poor by the rich the highest bidder would stand the best chance in the bargain. It was however, the negative impact of organ trading on the future development of a cadaver programme, especially in developing countries, that such practices were particularly reprehensible. Because unrelated kidney transplantation would alleviate the donor organ shortage on a short term, the development of a cadaver programme would either be stifled or relegated to a lower priority. The Transplantation Society sent members of its ethical committee to study this problem in India. The committee felt that rampant commerce driven by profit seeking entrepreneurs was clearly unethical<sup>10</sup>. The committee was less clear about some culture specific issues such as gifting. The so-called 'rewarded gifting' being practised in institutions where modest payments were made to donors without the middlemen was seen as justified if regulated by professional peers. The Indian Government, however, viewed unrelated donor transplantation with growing concern. The recently enacted transplantation law was a long awaited measure to check widespread unethical practices in transplantation so that defaulters could be subjected to legal scrutiny to be punished when found guilty. Some western ethicists have chosen to differentiate ethical issues in affluent and non affluent culture<sup>1</sup>. In affluent cultures, healthcare programmes as well as unemployment and sickness insurance provide sufficient safeguards for an equitable and just system of opportunities for transplantation. Cadaver

programmes in these cultures provide organs to patients with reasonable efficiency, therefore, organ selling is rightly condemned by such societies.

In the non-affluent cultures there is lack of social security and people die of poor nutrition and lack of medical care. Here, abject poverty blurs established ethical values. It is difficult to condemn the poor for not upholding the values prevalent in affluent cultures, but it is also true that such practices are likely to have a negative impact on altruism which has been the foundation of transplantation activity. The concept of rewarded gifting promoted by Reddy whereby, exploitation by middlemen is supposed to be replaced by compensation to donors in the supervision of professionals in an Institution<sup>12</sup> is well intentioned but the very fact that only a handful of centres have been able to sustain this against hundreds indulging in rampant commercialism speaks for the fragility of such a system. A non-corruptible panel of societal and professional peers entrusted with the task of approval of cases for unrelated donor transplants will be subject to all the pressures which bring corruption into developing societies in the first place i.e., the tribal or feudal structure of society, lack of education and unequal economic opportunities to all members of the society. Dossetor and Mamckavei have also proposed a utopian concept of indirect altruism whereby a donor organ could be provided to a potential recipient by another person who is suitably compensated in economic terms by an affluent member of society<sup>13</sup>. The patient gets the kidney, the person donating the kidney is rewarded adequately and the philanthropist does a good service to a very ill member of the society and all of this is supposed to take place without a middleman. They have proposed that part of the compensation is to be directed towards efforts for establishment of a cadaver programme which they call 'mandated philanthropy'. Again, the success of such a programme rests on the control of responsibility at each level to be enforced by a tribunal of peers and responsible members of society - a very difficult act to perform given the socio-economic setting in developing countries.

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