

Financial Incentives in Organ Transplantation: Ethical Views

Bagher Larijani¹, Saeedeh Sadeghi², Maryam Jessri², and Farzaneh Zahedi³

¹ Medical Ethics and History of Medicine Research Centre, Endocrinology and Metabolism Research Centre, Medical Sciences/ University of Tehran, Iran

² Medical Ethics and History of Medicine Research Center, Medical Sciences/ University of Tehran, Iran

³ Endocrinology and Metabolism Research Centre, Medical Sciences/ University of Tehran, Iran

ABSTRACT

Organ transplantation is the best and sometimes the only therapeutic method for some eligible patients. Unfortunately organ donation with altruistic intentions does not satisfy the big gap between supply and demand. The solution to this obstacle could be enriching the organ pool. As a result, living donation is being considered more seriously today. Many transplants experts believe that offering some kind of financial incentives to organ donors could act parallel to altruism. Although financial incentives have been proved to shorten the waiting lists, it seems the usage of it needs more ethical considerations. This paper has reviewed the ethical approaches to this dilemma.

“organ transplantation”, “kidney transplantation”, “ethics” and “organ transplantation”, “financial incentives” and “organ transplantation”, “Islamic views” and “organ transplantation”, “ethical principles” and “organ transplantation”, “Iranian model” and “transplantation” were used as keywords for a systematic search in Pubmed and Ovid databases.

It is suggested that organ shortage problems can be solved by establishing controlled donor compensation programs. From an Islamic ethical point of view Iranian model for kidney donation, despite its minor shortcomings could be considered acceptable. This model has the potential for revising, extending and using for other organ transplantation systems.

Key words: Financial incentives; Medical ethics; Organ transplantation

INTRODUCTION

Organ transplantation began about 50 years ago with a kidney- transplant performed in Boston.¹ The shortage of available organs for donation is a universal challenge and it has been an obstacle since its inception. Over the past three decades and with rapid improvements in the field of tissue matching, organ

transplantation has become a worldwide practice and has saved many of lives. The rapid growth in the number of persons in need of organ transplant has led to a dilemma in supplying organs and the results have been the lengthening queues to receive organs. Lack of donors has led to contractions between some patients and organ brokers to purchase an organ from a living donor. Human organs' trading is not only ethically unacceptable but many rational arguments have also been brought about on this issue. The big gap between the supply and demand necessitates new approaches to solve this problem.

Corresponding Author: Saeedeh Sadeghi MD;
Medical Ethics and History of Medicine Research Center, Medical Sciences/ University of Tehran, 16 Azar St., Keshavarz blvd, Tehran, Iran. Tel:(+9821) 6641 9661, E-mail:ds_sadeghi@sina.tums.ac.ir

MATERIALS AND METHODS

For compiling this article, we searched keywords of “organ transplantation”, “kidney transplantation”, “ethics” and “organ transplantation”, “financial incentives” and “organ transplantation”, “Islamic views” and “organ transplantation”, “ethical principles” and “organ transplantation”, “Iranian model” and “transplantation” in Pubmed and Ovid databases. We went through the articles which were published during 1993 to 2007. We also supplemented our searches with checking the reference lists of the articles and searching the relevant journals.

Articles considering any kind of monetary relationships between the donors and recipients were included. Multifactorial studies of ethical approaches to financial incentives in organ transplantation, papers published in languages other than English and those with an ambiguous aim were excluded.

The data were extracted on the basis of the key questions:

- “Which types of incentives are being used in organ transplantation?”
- “Is it ethical to benefit the donors financially?”
- “Which type of financial incentives is ethical for the donors?”
- “What are the pros and cons of financial incentives?”

Studies of any design in which the ethical aspects of specifying a financial incentive for the donors are discussed.

Organ Shortage Votes for Financial Incentives

Altruistic donation system, despite decades of experience, has so far failed to meet the ever-increasing need. Historically the current system of organ donation is based on altruism evolved during the 1960's and 1970's when issues such as the definition of brain death, use of donor cards, and public attitudes towards donation were only just evolving.²

Nowadays the list of potential recipients continues to grow at a rate approaching to 20 percent per year while the number of donors has risen by only half of that percentage over the same period.³

Since the payments for organ donation is illegal, it makes the organ supply to be confined to altruism, living related and cadaveric donation; the need for a

regulated incentive system is inevitable. Even public education to increase the rate of altruistic consent for organ donation has not resulted in an adequate supply of organs to meet the demand of those in need.⁴ In this system, individuals who need organ transplantation and they do not receive sufficiently altruistic reactions or they do not belong to a numerous family or out of luck, they must wait years until they become eligible for a usable organ from a cadaver. Besides some living related donors (LRDs) may not feel very altruistic but may be under strong family pressure to donate their organs to save the life of siblings or parents.¹ Psychosocial screenings and supports seem necessary to help to decrease this adverse effect. On the other side there is an argument that the supply of traditional donors is low due to decrease rates of accidental death and there is concern about transmissible disease such as AIDs and hepatitis.

Failure and inadequacy of solutions mentioned above in diminishing the gap between supply and demand brings concept of financial incentives to the mind.

Financial Incentive: Definition and Types

Financial incentive would be any material gain or valuable consideration by those directly consenting to the process of organ procurement whether it is the organ donor himself/herself or the donor's family.⁵ The concept that financial incentives are offered as a potential solution to the ongoing organ donor shortage has been previously considered and debated among experts in the field of transplantation and ethics.

Over 26500 organs were transplanted in the United States during 2004; over 19500 of them from deceased donors and 7000 from living donors. These numbers represent an increase of 6% in total number of organ transplanted compared to 2003. However the size of the waiting list also increased during this time. In 2005 there were 98858 registrations on the waiting list for organ donations by the end of the year. In the same year, there were only 28108 life saving organ transplants in the United States.⁶ By the end of the same year, a total of 19,609 renal transplantations were carried in Iran. 3421 of these cases were from LRDs and 15,365 from living unrelated donors (LURDs) and 823 of these cases were from deceased donors.⁷

The idea of financial incentives is considered as a

Financial Incentives in Organ Transplantation: Ethical Views

remedy to the organ shortage. Incentives can take a number of forms. A wide spectrum of compensatory payments could be made to donors. A financial incentive for organ donation could be accomplished by the following approaches:

1) Direct payment of a sum of money (it could be regulated or unregulated) to the donors (or decedent's family). It is the simplest straight forward form of payment, but this is the most criticized form of financial incentives.⁸

2) Reimbursement of the expenses. It could be directly attributable cost e.g. travel and hospital expenses and any loss of wages for living donors and reimbursement of funeral expenses for donor decedents. This is suggested as the softest type of financial incentives.⁹

3) A form of "donor insurance" that the individual agrees in advance to donate his or her organ, with payment to his or her beneficiaries. This model would allow individuals to "opt in" to the donation process while still living and their families are compensated at such time as they actually become donors. This system respects the autonomy of the individual and avoids negative action to preclude donation.²

4) Offering health insurance and sacrifice gift which is arranged and defined by Charity Association for Support of Kidney Patients (CASKP). This gift is a certain amount of money (approximately 1200 US \$) which is paid by the recipient himself/herself or if the recipient could not afford it, one of the charitable organizations would pay the gift. This is the "Iranian model of renal transplantation". In addition, all the hospital expenses are paid by the government, and there is no role for a broker.

5) There are some other types of less common incentives, such as an exempt in income taxes, estate benefit and a contribution to a charitable organization determined by the family or the deceased.¹⁰

Financial Incentives: For and Against

Against:

1) Marketing of human organs is proscribed in United states and the Ethics committee of the transplantation society has issued a policy statement that no transplantation surgeon / team shall be involved directly or indirectly in the buying or selling of organs/tissues or in any transplant activity aimed at

commercial gain to himself/herself or an associated hospital or institute, within 5 years. Several countries and the World Health Organization issued similar bans.¹¹

2) Universal strong condemnations of selling organs have been issued by voluntary health agencies and religion authorities who consider organ marketing as an act violating human dignity.¹² They believe any attempt to assign a monetary value to the human body or their parts, even in the hope of increasing organ supply, diminish human dignity and devalue the human life, which we seek to save.¹³

3) Some argue that the difference between the sale of irreplaceable organs and renewable ones like blood should be appreciated while examining the arguments supporting the sale of organs, which is a completely invasive and major surgery under anesthesia. It is essentially imperative to recognize the risk of allowing people to do serious damage to themselves for the sole reason of making money.

4) Some authors believe, financial incentives would lead to commercialization and exploitation of lower income groups, the under privileged would sell their organs and the wealthy would be the beneficiary. The family members of the underprivileged donors, who will need a transplant in the future, may be unable to afford the organ that they need.⁵

5) On the other hand, financial pressures to donate in some circumstances would present such a conflict of interest that donors or donor families would be unable to give a credible informed consent. Payment for organ donation from living individuals would encourage impulsive provision of organs, because donors would not be able to sufficiently calculate the risks involved.¹⁴

6) The long waiting list encourages the development of a black market in live or cadaveric organs, where donors or their heirs get paid. These transplants are available only to wealthier individuals who usually must bear the total expense themselves. The black marketing, the undoubted presence of illegal middlemen, the failure of law in preventing allegations of active collusion of transplant surgeons, nephrologists and members of the regulatory bodies in facilitating commercial transplantation,¹⁵ the negative effect on cadaveric and related donation in developing countries,¹⁶ are the other challenges some authors picture for a regulated system of financial incentives

for organ donation. In addition, these transplantation procedures are much riskier, because organs are not screened as carefully for disease and not matched as closely to recipients.¹

7) The marketing system might allow the recipient not to express any gratitude and consider the event as a matter of fact, like a buyer, not like a recipient.

8) Some others who oppose financial incentives, believe that giving financial advantages to donors may bring several undesirable consequences such as, withholding of medical information that results in the transmission of the donor disease (malignancy, infection) to the transplant recipient.¹⁷ On the other hand this may influence the family of a recipient to prematurely withdraw the care.¹⁸

For:

1) There are thousands of people dying to buy a kidney, and thousands of people dying to sell a kidney. It seems a heavenly made match. Proponents believe that the government should not ban the sale of human organs, they have to regulate it because lives should not be wasted; they should be saved.¹⁹

2) There is a widespread sentiment that live donors should not personally bear any costs associated with donation.^{20,21} The existing legislation does not prohibit reasonable payments associated with the removal, transplantation, implantation, preservation, and the expenses of travel and lost wages incurred by the human donor in connection with the donation of the organ. Moreover they say that the concept of expense reimbursements is different from a payment that enriches a vendor.²²

3) A reimbursement of expenses or a continuation of salary by an employer is ethically acceptable. Live donors should have some insurance against potential disability or death as a result of the donation procedure.²³

4) Some surgeons advocate regulated sale of kidney to prevent death of 100,000 people each year²⁴ and some note that a wait time of over 5 years, induces death on the waiting list of 7% annually, called for a regulated system of living kidney sales.²² It would increase the supply of organs and thereby secures the basic ethical concern of saving lives that may be lost due to lack of these resources.

5) Proponents of regulated financial incentives argue that when the issue of financial incentive is discussed in regards to organ donation immediately there is a negative connotation. The word "donor" which has a positive connotation is replaced with the word "vendor" and "incentive" is replaced with the word "payment".²⁵ They suggest that the fear of exploitation and commercialization would be minimized if the financial incentives were government regulated to ensure that "donors would receive education about their choices, undergo medical and psychological screening and receive quality follow-up care. How is it unfair to poor people if compensation enhances their quality of life?"

6) With the sale of kidney outlawed in almost every country, the number of living donors willing to part with a kidney for free remains small. When no suitable family member for donation is available, the patient is placed on a deceased donor list, relying on the organs from people dying of old age or accidents, or circumvents this list with paying to willing living donors. In black markets in United States they can buy a fresh kidney from a healthy donor for about \$150000.

7) Failure to allow for financial incentives not only interferes with an individual's autonomy but conflicts with individual liberty. We will violate people's right to make them change their own choices.

8) In response to the idea of the authors who propound the impulsive provision as an obstacle, some other believe that if impulsive donation were a problem a few week will be necessary to give donors sufficient time for making a decision. It could be required that we inform donors about the risks during surgery, the length of recovery period, and other possible risks. Besides, payment does not prevent other motives, such as to help relative who are sick and altruism had been an insufficient motive.¹

The Iranian Model

Many attempts have been made for strengthening medical ethics by Iranian authorities in recent years.^{26,27} Since altruism solely could not solve the problem of organ shortage which is getting more severe worldwide; despite the arguments against marketing the organs, some believe that legalizing organ donation may satisfy this shortage. In Iran, just like other parts of the world there was an enormous lack of organs for

donation. Between 1967 and 1985 critical situations such as past revolutionary state, imposed war, and limited transplant activities in the country, has made the ministry of health to fund the patients in need of organ transplantation receive treatment abroad. The various external embargoes, the high expenses and the large number of patients wishing to receive a transplant and long queues at the ministry of health, prompted health authorities to establish transplant facilities inside the country.^{7,28}

In 1988 there were so many patients in need of an organ who had no living related donor, and the deceased-donor organ transplantation program had not been established. Therefore a transplantation program from LURDs was established in 1988.⁷ Along with this program, great endeavors were made for appropriate legislations in the field of organ transplantation, particularly ratifying the Brain Death Act.²⁹⁻³¹

Although arguments about monetary relationship between donor and recipient are not restricted to any specified organ but because of the large number of kidney transplantation it is more common around this organ.

After the adaptation of Iranian model in 1988, the number of transplant centers has increased from 2 to 25³². At the end of 2005, the number of renal transplantation was 19,609 (28 per million people). More than 78% of this number has been from LURDs.⁷

The initiation to provide compensation was began in Iran in 1997. "Sacrifice Gift" is an amount of money paid by the society to compensate altruism, although human organ is invaluable. A nongovernmental organization is responsible for providing this gift. According to Iranian model, aside from tissue matching, the donor has to be screened for serious contagious disease (HIV and Hepatitis B) and would be evaluated psychosocially. The donor signs a pledge that he or she would not ask any kind of monetary or reward compensation from the recipient and the recipient commits not to compensate the donor directly. The letter of agreement must be signed by a witness (spouse or parents of the donor). In this model all efforts have been made in order to prevent illegal and direct compensation of the donors.

DISCUSSION

Most of the Shiite and Sunnite jurisprudents permit the organ transplantation. The base of this permission is the significant value of human life in Islam. The four principles of ethics are in the overlapping areas of Islam and Western ethics, even though there are differences in interpretation and practical applications.³³ Although Islamic point of view respects the freedom and autonomy of every human being, the trade of human organs is not accepted generally. Encouraging altruistic organ donation has been the place of emphasis by the Islamic jurisprudents, but in emergency situations (lack of organs and when human life is at stake) they allow a regulated compensation and preferably a system based on offering a reasonable gift to the donor only to acknowledge his/her altruism.

There are some concerns about informed consent coercion, and exploitation of the most vulnerable. Opponents of financial incentive for organ donation argue that the poor people will be exploited because financial concerns will be used as a form of coercion. A sense of mistrust also exists among low income groups. Proponents argue that to deny financial incentives caused by fearing of exploiting low income groups implies that they are incapable of making voluntary decisions. Prohibiting low income people from receiving financial incentives for donating their organs because of fearing of abuses do not really help poor people.

Beneficence is the obligation to prevent and remove harms and to promote the good of the person by minimizing the risks and maximizing the benefits to them and others. Non-maleficence prohibits the infliction of harm, injury or death upon others. Financial incentives for cadaveric organ donation could increase the supply of organs and as a result could save the lives of many recipients waiting for organs. This will not only benefit the donor and his/her family by doing something that will help others and also receiving financial incentive, it has the potential to save others lives and would be good for society as whole. Organs harvesting does not harm the donor, instead it allows the donor to give something back to the community.

Some opponents will argue the possibility of abuse to poor, trafficking in body parts and exploitation of the

poor by the rich is very high but proponents of financial incentives believe that these risks and possible abuses can be countered by appropriate medically and ethically justified regulations.

Justice recognizes that each person must be treated fairly and equitably. Justice also pertains to distributive justice, which concerns the fair and equitable allocation of resources, benefits and burden, according to a just standard. As social human beings we ought to contribute to the good of others and society as whole. Opponents argue that this kind of compensation is just the first step towards allowing buying and selling of organs³⁴. The very wealthy are the buyers and the poor are the sellers. This unequal distribution of medical resources is completely unjust.³⁵ Proponents of financial incentive argue that giving incentive will not only increase the supply of organs but also decrease medical costs and allow for allocation of resources in a fair way for poor and rich people.

CONCLUSION

Many of arguments against a market for human tissue are not arguments against commercialization. They are focused more on who should benefit financially and how much. Nevertheless, the fears of exploitation and commercialization would be minimized if the financial incentives were government regulated to ensure that donors would receive education about their choices, undergo careful medical and psychological screening and receive high quality follow-up care.

Although the literature defending commercial dealings in human organ donation is now prolific, little of it is especially directed towards live organ providers. Some authors believe that autonomy and self-determination interests of donors and recipients are undermined by the guise of existing prohibitions. This conclusion has particular force for right-based moral theories, which reject the idea that organ providers can owe direct duties to themselves, and this is presented as a solution to the vast organs shortage.

It is uniformly accepted that commercial transplantation is certainly unethical when brokers are involved or the aim is just profit for transplant physicians, because the main reason in favor of organ

sales is improving the quality of life of the patients and the donors not the brokers or the physicians.

It is suggested that organ shortage problems can be solved by establishing controlled donor compensation programs. Policies like educating donors about their choices, reimbursement of lost wages, providing insurance against potential disability or death and a systemized follow-up program are not only ethically acceptable but also helps to improve the donors' quality of life. It is impossible to suggest a uniform solution for all countries because of deep difference in economical status as well as social and cultural values. Thus, every country should build its own ethical standards for commercial transplantation.^{24, 36}

REFERENCES

1. Becker G.S, Elias J.J. Introducing Incentives in the Market for live and cadaveric organ donations. Conference organ transplantation: economic, ethical and policy Issues at the University of Chicago, May 16, 2003.
2. Burrows L. Selling organs for transplantation. Mt Sinai J Med 2004; 71(4):251-4.
3. Nelson E.W, Childress JE, Perryman J, Robards V, Rowan A, Seely MS, Sterloff S, Wanson MR. Financial Incentives for organ Donation. A report of the payment subcommittee united Network for organ sharing Ethics Committee. Richmond, Virginia: UNOS, 1993.
4. Peters T.G. Life or death: the issue of payment in cadaveric organ donation. Journal of the American Medical Association 1991; 265(10):1302-50.
5. Clarck P.A. Financial Incentives for cadaveric organ donation: An Ethical Analysis. The internet journal of law, healthcare and ethics 2006; 4(1). <http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijlhc/vol4n1/organ.xml> (Accessed on 2006/12/5)
6. United Network for organ sharing. "Organ Donation and Transplantation". <http://www.unos.org> (Accessed on 2006/12/5)
7. Data on OPTN. <http://www.optn.org/data/> (Accessed on 2006/12/5).
8. Ghods A.J, Savaj S. Iranian model of paid and regulated living-unrelated kidney donation. Am Soc Nephrol 2006; 1:1136-45.
9. Kahn JP, Delmonico FL. The consequences of public policy to buy and sell organs for transplantation. Am J Transplant 2004; 4(2):178-80

Financial Incentives in Organ Transplantation: Ethical Views

10. Pattinson SD. Paying living organ providers. http://www.Spr-consilio.com/paying_living_organ_providers.pdf (Accessed on 2007/1/4)
11. Delmonico FL. Financial Incentives for organ donation. <http://www.medscape.com/veiwarticle/465739> (Accessed on 2006/12/11)
12. Guiding principles on human organ transplantation. World Health Organization. *Lancet* 1991; 337(8755):1470-1.
13. Pop John paul II *Evangelium Vitae*. Encyclical letter on the value and inviolability of human life 1995 March 25. <http://www.taxpolicy.com/johnpaul.htm> (Accessed on 2006/12/11)
14. Erin CA, Harris J. An ethical market in human organs. *J Med Ethics* 2003; 29(3):137-8.
15. Spital A. Increasing the pool of transplantable kidneys through unrelated living donors and living donor paired exchanges. *Semin Dial* 2005; 18(6):469-73.
16. Jha V, chugh KS. The case against a regulated system of living kidney sales. *Nat Clin Pract Nephrol* 2006; 2(9):466-7.
17. Mani MK. Development of cadaver renal transplantation in India. *Nephrology* 2002;7(4)177-82.
18. Friedlander MM. The right to sell or buy a kidney: are we failing our patients? *Lancet* 2002; 359(9310):971-3.
19. Council of The Transplantation Society: Commercialization in transplantation: the problems and some guidelines for practice. *Lancet*. 1985; 2(8457):715-6.
20. Mackay J. organ sales will save lives 2004. http://ocw.mit.edu/NR/rdonlyres/Science--Technology--and-Society/STS-011Fall-2004/B851C584-E3D6-4BB4-BF71-94B19FB9B066/0/organ_selling_tr.pdf (Accessed on 2007/03/13).
21. Harris J, Erin C. An ethically defensible market in organs. *BMJ* 2002; 325(7356):114-5.
22. Radcliffe-Richards J, Daar AS, Guttman RD, Hoffenberg R, Kennedy I, Lock , et al. The case for allowing kidney sales. *International Forum for Transplant Ethics. Lancet* 1998; 351(9120):1950-2.
23. Matas AJ. The case for kidney sales: rationale Objections and concerns. *Am J Transplant* 2004; 4(12):2007-17.
24. Sanford J.T, Rocchiccioli JT. Cash for kidneys: the use of financial incentives for organ donation. *Policy, politics and nursing practice* 2003; 4(4): 275-280.
25. Fridman EA, Fiedman AI. Payment for kidney donors: pros and cons. *Kidney international* 2006; 69(6): 960-2.
26. Matas A. living kidney donation: controversies and realities. The case for a regulated system of living kidney sales. Program and abstracts of the American transplant congress 2005. 6 annual joint meeting of the American society of transplant surgeons and the American society of transplantation; Seattle, Washington. 2005.
27. Larijani B, Malek-Afzali H, Zahedi F, Motevaseli E. Strengthening medical ethics by strategic planning in the Islamic Republic of Iran.. *Developing World Bioeth* 2006; 6(2):106-10.
28. Larijani B, Zahedi F, Malek-Afzali H. Medical ethics in the Islamic Republic of Iran. *East Mediterr Health J*. 2005; 11(5-6):1061-72.
29. Larijani B, Zahedi F, Ghafouri-Fard S. Rewarded gift for living renal donors. *Transplant Proc* 2004; 36(9):2539-42.
30. Larijani B, Zahedi F, Taheri E. Ethical and legal aspects of organ transplantation in Iran. *Transplant Proc* 2004; 36(5):1241-4.
31. Larijani B, Zahedi F, Taheri E. Deceased and living organ donation in Iran. *Am J Transplant* 2006; 6(6):1493.
32. Akrami SM, Osati Z, Zahedi F, Raza M. Brain death: recent ethical and religious considerations in Iran. *Transplant Proc* 2004; 36(10):2883-7.
33. Bagheri A.R. Compensated kidney donation: an ethical review of the Iranian model. *Kennedy Inst Ethics J* 2006; 16(3):269-82.
34. Larijani B, Zahedi F. Contemporary medical ethics: an overview from Iran. *Developing World Bioethics* 2006, in press.
35. Anasari M. Pakistan: the world's new kidney Bank June 2, 2003. <http://www.pakistanlink.com/Letters/2003/May/30/02.html> (Accessed on 2007/03/13).
36. Kishore R. Human organs, scarcities, and sale: morality revisited. *J Med Ethics* 2005; 31(6):362-5
37. Sever MS. Living unrelated-commercial-kidney transplantation: when there is no chance to survive. *Pediatr Nephrol* 2006; 21(10):1352-6.