

Spring 1998

The Body as Commodity: The Use of Markets to Cure the Organ Deficit

David E. Jefferies

Indiana University School of Law

Follow this and additional works at: <http://www.repository.law.indiana.edu/ijgls>

 Part of the [International Law Commons](#), and the [Securities Law Commons](#)

Recommended Citation

Jefferies, David E. (1998) "The Body as Commodity: The Use of Markets to Cure the Organ Deficit," *Indiana Journal of Global Legal Studies*: Vol. 5: Iss. 2, Article 13.

Available at: <http://www.repository.law.indiana.edu/ijgls/vol5/iss2/13>

This Note is brought to you for free and open access by the Law School Journals at Digital Repository @ Maurer Law. It has been accepted for inclusion in *Indiana Journal of Global Legal Studies* by an authorized administrator of Digital Repository @ Maurer Law. For more information, please contact wattn@indiana.edu.



JEROME HALL LAW LIBRARY

INDIANA UNIVERSITY
Maurer School of Law
Bloomington

The Body as Commodity: The Use of Markets to Cure the Organ Deficit

DAVID E. JEFFERIES*

I. INTRODUCTION

"Burke and Hare were so stimulated by the easy money that they decided to make more by creating their own corpses."¹

Debate has long swirled around the question of what rights, if any, persons have to dispose of their bodies and body parts. The recognition or creation of such rights could lead to ethical dilemmas. For example, if disposal rights are created or recognized, bodies and their parts may become commercialized, thereby resulting in human rights violations. A gross manifestation of this problem arose in early nineteenth-century England. There the use of cadavers for teaching anatomy in medical schools led to the infamous "body-snatching" scandals to supply the trade with human corpses.² The market created resulted not only in the theft of dead bodies, but also served as a catalyst for murders; the infamous William Burke, who lived in a lodging house in Edinburgh, murdered sixteen of his guests over a period of one year and sold their bodies to the local medical school.³

In response to these scandals, the English legislature enacted the Anatomy Act of 1832, which provided for the "licensing of both instructors and students of anatomy, supervision by government inspectors, and the filing of regular reports."⁴ The Act also created criminal liability for "body-snatching."⁵ This brief exercise in a free market resulted in unfortunate consequences and should now serve as a cautionary reminder of the dangers of allowing a market in the constituent organs of the human body to operate unabated.

* J.D., 1998, Indiana University School of Law, Bloomington; M.S., Biotechnology, 1993, Northwestern University; B.A., Biology, 1992, Earlham College. The author would like to thank his parents, Robert and Sylvia Jefferies, for their support throughout school.

1. RUSSELL SCOTT, *THE BODY AS PROPERTY* 9 (1981).

2. *Id.* at 4.

3. *Id.* at 9.

4. *Id.* at 11.

5. *Id.* See also Jason Altman, *Organ Transplantations: The Need for an International Open Organ Market*, 5 *TOURO INT'L L. REV.* 161, 162 (1994).

. To date, it appears that the warning has been heeded. Only a few countries, principally India and certain South American nations, have a system of organ procurement for nonregenerative organs that operates on free market principles.⁶ Although "body snatching" scandals are no longer prevalent, the value of the human body nevertheless creates the danger of the development of black markets. With the advent of successful organ transplant techniques, the greatest value in the human body now inheres in its component parts.⁷ To what lengths might a desperately ill person be willing to go to obtain a body part that might dramatically improve the quality of such person's life or even literally save it? After all, the benefits from transplants flow to the patient, the family of the donor, and society alike. Medicine has developed the ability to save and improve the quality of life for organ recipients. At the same time, the altruistic nature of the operation may help the surviving family cope with their feelings of grief and loss.

In current transplantation practice, an ever-widening gap exists between the number of organs needed for transplantations and the number of organs donated.⁸ Various systems have been proposed to increase the supply of organs and solve this shortage. All systems implemented thus far have a common element: they have all failed. In response, commentators have suggested that creating an open market in organs would solve the supply problem. This proposal has met a heated reaction on many levels. Admittedly, market systems bring the benefit of increased supply through financial incentives. However, this is only half of the equation. If a market system were to be used, safeguards would be needed to avoid the pitfalls which befell England when it allowed trade in corpses.

Part II of this note briefly examines the history of organ transplantation and the increasing shortage of organs. Part III examines the history and the current legal status of the organ donation system in the United States. Part IV

6. H. Kreis, *Worldwide Organ Trafficking: Fact or Fiction?*, in *ORGAN AND TISSUE TRANSPLANTATION IN THE EUROPEAN UNION: MANAGEMENT OF DIFFICULTIES AND HEALTH RISKS LINKED TO DONORS* 67, 70 (Yvon Englert ed., 1995). Regenerative organs are those that the body can replace, such as blood, sperm, ovum, cells, and hair. Nonregenerative organs are those that cannot be replaced, such as the heart, lungs, liver, pancreas, and kidneys. Gloria J. Banks, *Legal and Ethical Safeguards: Protection of Society's Most Vulnerable Participants in a Commercialized Organ Transplantation System*, 21 *AM. J.L. & MED.* 45, 47 (1995).

7. SCOTT, *supra* note 1, at 3.

8. See Mark F. Anderson, *The Future of Organ Transplantation: From Where Will New Donors Come, To Whom Will Their Organs Go?*, 5 *HEALTH MATRIX* 249, 253 (1995); Marla Clark, *Solving the Kidney Shortage Crisis Through the Use of Non-Heart-Beating Cadaveric Donors: Legal Endorsement of Perfusion as a Standard Procedure*, 70 *IND. L.J.* 929, 930-32 (1995); Melissa N. Kurnit, *Organ Donation in the United States: Can We Learn From Successes Abroad?*, 17 *B.C. INT'L & COMP. L. REV.* 405, 427 (1994).

compares and contrasts organ procurement systems of other countries and evaluates the advantages and disadvantages of each system. Particular attention is given to the countries of the European Union as well as the Chinese system with its flagrant human rights violations. Part V proposes a system of market incentives to encourage people to donate their organs. This proposed system should expand the pool of donors, thereby increasing the supply of available organs. To avoid the pitfalls arising from bartering for organs, this proposal advocates a limited market where individuals will be allowed to enter into contracts to sell their organs only to licensed organ "warehouses." This system will prevent the exploitation of the poor to provide organs for the wealthy. The "warehouses" will use altruistic criteria to decide who receives the organs purchased by these organizations. Over time, the need for criteria will abate as the shortage of organs is reduced and eventually eliminated.

II. A HISTORY OF ORGAN TRANSPLANTATION AND THE ORGAN SHORTAGE

A. *Transplantation History*

The first kidney transplant, using a cadaver, was performed in the Soviet Union in 1936; by 1954, doctors in the United States had accomplished this feat using a living donor.⁹ In the ensuing decades, advances in organ transplantation techniques evolved with increasing rapidity. The first successful heart transplant was performed in South Africa in 1967 and the first larynx transplant in Belgium in 1969.¹⁰

Medical science made improvements not only in the types of organs that could be transplanted, but in the survival rates of the patients as well. Although the first recipient of a heart transplant lived only eighteen days, by 1992, eighty-five percent of heart transplant recipients survived at least one year.¹¹ Much of this improvement in survival rates can be attributed to the discovery of various immunosuppressive drugs—most notably cyclosporin, introduced in

9. Kurmit, *supra* note 8, at 407. See also SCOTT, *supra* note 1, at 20.

10. Kurmit, *supra* note 8, at 407.

11. *Id.*

1983—which allowed doctors to control the body's rejection of donated organs.¹²

The period of time over which a harvested organ's viability may be maintained before its transplant into the recipient body has also been increased, thereby allowing for a greater geographical range in which to match donors and donees.¹³ As a result, the number of potential organ transplant recipients has been greatly increased. Unfortunately, the number of organs donated has failed to keep pace.

B. The Organ Shortage

Annually, 300,000 people receive organ transplants worldwide.¹⁴ Not everyone who needs a transplant receives one, and there remains a surplus of patients waiting to receive an organ. Every year this number increases. At the close of 1994, 37,684 patients languished in hospitals and homes, their names still on waiting lists.¹⁵ By May 4, 1995, that number had risen to 39,845; a figure that has grown as long as there have been records.¹⁶ However, these numbers do not tell the complete story. Physicians, knowing that organ supplies are limited, have kept the waiting lists artificially low by referring only the best candidates for transplant.¹⁷ There may be as many as 15,000 persons who need heart transplants, 22,500 who need kidney transplants, 5,000 who need liver transplants, and 5,000 who need pancreas transplants.¹⁸ The supply falls far short of the need since approximately 4,500 cadaveric donors are obtained each year.¹⁹ This short fall continues to grow as survival rates cause the organ demand to increase while the pool of voluntary donors remains static.²⁰

The needless death of those on waiting lists is not the only problem attributable to the organ deficit. Another problem is the existence of a black market. Physicians must choose between patients when allocating

12. Theodore Silver, *The Case for a Post-Mortem Organ Draft and a Proposed Model Organ Draft Act*, 68 B.U. L. REV. 681, 682 (1988).

13. Kurnit, *supra* note 8, at 408.

14. Christian Williams, *Combating the Problems of Human Rights Abuses and Inadequate Organ Supply Through Presumed Donative Consent*, 26 CASE W. RES. J. INT'L L. 315, 318 (1994).

15. Clark, *supra* note 8, at 930-31.

16. Anderson, *supra* note 8, at 253.

17. *Id.* at 270-71.

18. Gregory S. Crespi, *Overcoming the Legal Obstacles to the Creation of a Futures Market in Bodily Organs*, 55 OHIO ST. L.J. 1, 9 (1994).

19. Anderson, *supra* note 8, at 258.

20. Kurnit, *supra* note 8, at 427-28.

organs—some get organs and some are refused. As a result, patients who feel they can no longer wait for an organ, and can afford the increased cost, may turn to the black market for organs.²¹ The problems caused by this black market are increasingly international as people with funds travel between countries to search for needed organs.²² Countries that provide a surplus of organs invariably are the ones with the least restrictions on trade in organs, thereby producing an international market that generates human rights violations and organ sales by the poor.²³ Additionally, organs procured in these markets often do not meet the quality standards found in the patient's home country.²⁴ Increasing the supply of available organs in other nations is crucial to ameliorating the problems of the international black market and its human rights abuses, as well as providing organs for all who may need them. This can be easily seen if one considers a situation where domestic supply meets domestic demand. In such a situation, people would not travel abroad to a risky market to purchase an illegally obtained organ at an increased price.²⁵

If the crucial variable in solving the organ transplant problem is the increased supply of organs, does such a potential pool exist? In short, the answer is yes. An estimated 20,000 usable cadavers are buried each year without having had any of their organs harvested.²⁶ These cadavers could provide 40,000 kidneys and 20,000 hearts, livers, and lung pairs.²⁷ Unfortunately, most people die without donating their organs. Current data from the Center for Disease Control suggests that only fifteen percent of people actually become organ donors.²⁸ This is simply not enough.

Enough organs exist to make substantial inroads into reducing, if not completely eliminating, the organ deficit. The problem is that most systems for acquiring and distributing organs are woefully inadequate. That people die every day of incurable disease is an awful truth. However, it is unacceptable that there are needless deaths from curable diseases when there is a potentially available supply of the materials (in the case of transplant--organs) that would eliminate these needless deaths. A system of organ transplantation must be designed and put in place that harnesses donative incentives to increase the

21. Williams, *supra* note 14, at 316.

22. *Id.* at 320.

23. *Id.*

24. *Id.* at 322.

25. *Id.*

26. Crespi, *supra* note 18, at 10; Silver, *supra* note 12, at 687.

27. Silver, *supra* note 12, at 687.

28. Clark, *supra* note 8, at 931.

supply of organs, thereby eliminating the need for waiting lists and factors used to decide that one person should live and simultaneously consign another to death.

III. THE UNITED STATES ORGAN DONATION SYSTEM

In the United States, several criteria are used to ration access to organ transplants. These criteria are necessary due to the shortage of organs for transplantation. To increase the chances of a successful transplant, it is preferable that cadavers be brain dead, but still have a beating heart, be younger than fifty-five, and have an organ free from infection or metastatic cancer.²⁹ Live kidney donors must be between fifteen and eighty, have two healthy, properly functioning kidneys, and be medically compatible with the recipient.³⁰ All that is required of a recipient is that the recipient be suffering from organ failure, free of infection or cancer, and able to tolerate surgery.³¹

Unfortunately, due to the shortage of organs, two or more people are often medically ready and capable of a transplant, but there is only one organ to give. As a result, physicians and other medical personnel make the choice by weighing the patients' social worth. Criteria include some family-related considerations such as marital status and number of dependents; other criteria are income, educational background, employment record, relationship to authority figures, past irresponsible behavior, and intelligence.³² A system, that decides who lives and dies based on considerations such as income and education is unfortunate and may lead to inequitable results. A significant increase in the supply of organs would cure the shortage in organs, thereby eliminating the necessity for a system of criteria to decide who receives organs and who does not. Several different methods have been proposed to eliminate the organ shortage. These include systems of encouraged voluntarism and

29. Clive O. Callender, *Legal and Ethical Issues Surrounding Transplantation: The Transplant Team Perspective*, in HUMAN ORGAN TRANSPLANTATION: SOCIETAL, MEDICAL—LEGAL, REGULATORY, AND REIMBURSEMENT ISSUES 42, 42 (Dale H. Cowan et al. eds., 1987). In the process of metastasis, "small clusters of cancerous cells dislodge from a tumor, invade the blood or lymphatic vessels, and are carried to other tissues, where they continue to proliferate. In this way a primary tumor at one site can give rise to a secondary tumor at another site." JANIS KUBY, IMMUNOLOGY 506 (1992).

30. Callender, *supra* note 29, at 42.

31. *Id.* at 43.

32. Banks, *supra* note 6, at 63. See also NEW YORK STATE TASK FORCE ON LIFE AND THE LAW, TRANSPLANTATION IN NEW YORK STATE: THE PROCUREMENT AND DISTRIBUTION OF ORGANS AND TISSUES (1988).

presumed consent, among others to be discussed later. One suggested method allows people to sell their organs.

In order to sell their organs, people would need some recognized ownership or property right in their own bodies and their component parts. This raises the question: what is the nature of property rights in the human body? The prevailing view is that a modicum of property rights exist in human cadavers.³³ The English common law recognized a right to bury one's dead, termed a "quasi-right in property," which remains the rule in the United States.³⁴ Cogent arguments have also been made that rights existing in relation to the body strongly resemble property rights, such as the prohibition of slavery and false imprisonment, the ability to contract for employment, and the existence of assault and battery laws.³⁵ Historically, people have not been allowed to alienate the parts or sum of their bodies to others. The property rights that inhere in an object are often characterized as a bundle of sticks. A person need not possess all the sticks in the bundle to enjoy the ownership of property. With human materials, people certainly own them, but lack the stick which encompasses the right to sell.³⁶ As we shall see, under existing law in the United States and most other countries, the right to sell is absent.

The system of organ procurement in the United States is set out in various legislative acts. In this legislation, the United States recognizes a shortage of organs for transplantation and attempts to correct the deficit. The remainder of this section will discuss the 1968 Uniform Anatomical Gift Act, its 1987 revision, and the National Organ Transplant Act, along with some criticisms levied against the current U.S. system of organ procurement.

A. The 1968 Uniform Anatomical Gift Act

In an attempt to curtail the shortage of organs for transplant, on July 30, 1968, the National Conference of Commissioners on Uniform State Laws

33. Paul A. Gerike, *Human Biological Material: A Proprietary Interest or Part of the Monistic Being?*, 17 OHIO N.U. L. REV. 805, 812 (1991).

34. *Id.*

35. Danielle M. Wagner, *Property Rights in the Human Body: The Commercialization of Organ Transplantation and Biotechnology*, 33 DUQ. L. REV. 931, 933 (1995).

36. *Id.* at 934; Gerike, *supra* note 33, at 810.

approved the Uniform Anatomical Gift Act (UAGA).³⁷ This Act gives anyone who is at least eighteen years of age and mentally competent the right to designate whether or not he will donate his organs for transplantation after death.³⁸ This version of the UAGA neither expressly allowed nor prohibited the sale of human organs.³⁹ It did, however, restrict who was allowed to be the recipient of organs to "hospitals, doctors, medical and dental schools, universities, organ and tissue banks, and any specified individual in need of a transplant."⁴⁰

In practice, the impact of the UAGA was very modest. Although, under the UAGA, the deceased's decision whether to donate does not require the approval of the next of kin, it has been the general practice of physicians to inquire as to the next of kin's preferences concerning donation and not to proceed with the harvest of organs absent their approval.⁴¹ In essence, the UAGA promoted a system of encouraged voluntarism. This system was "lauded because it 'encourage[d] socially desirable virtues such as altruism and benevolence without running the risk of abusing individual rights.'"⁴² However, it was quickly realized that the UAGA failed to address many of the problems concerning the organ shortage, resulting in the continued existence of this deficit. Generally, three problems were thought to prevent an increase in organ donation:

The first problem is the personal reluctance of individuals to donate organs.⁴³ The reasons for this reluctance vary and are numerous: denial of mortality; fear that the medical community will not use every effort to save the donor patient's life in order to harvest the patient's organs; opposition to organ donation stemming from a religious belief or the belief that the surviving family should decide the question; and disgust at the idea of having an organ

37. *Uniform Anatomical Gift Act (Final Draft)*, reprinted in *STATUTORY REGULATION OF ORGAN DONATION IN THE UNITED STATES I* (R. Hunter Manson ed., 2d ed. 1986).

38. *Developments in the Law—Medical Technology and the Law: Organ Transplantation*, 103 HARV. L. REV. 1614, 1617 (1990).

39. Gerike, *supra* note 33, at 813.

40. Kurnit, *supra* note 8, at 410.

41. Anderson, *supra* note 8, at 264.

42. Kurnit, *supra* note 8, at 426.

43. *Id.* at 428.

removed.⁴⁴ While some of these problems are largely intractable (religious belief, denial of mortality), some can be solved at least in part. For example, the fear that doctors will not do everything in their power to save the life of a donor can be dealt with through an educational campaign. Donors can be alerted that most nations adhere to the Guiding Principles announced by the World Health Organization for organ transplantation. Guiding Principle 2 declares: "Physicians determining that the death of a potential donor has occurred should not be directly involved in organ removal from the donor and subsequent transplantation procedures, or be responsible for the care of potential recipients of such organs."⁴⁵ The problem with the altruistic system is that it merely states that people should donate their organs in spite of their fears. One key then, to increasing the supply of organs, is a system that (1) educates potential donors as to which fears are unfounded and (2) provides people incentives to set aside their fears.

A second problem with encouraged voluntarism is that when a patient dies—with or without a donor card—the next of kin is often reluctant to authorize the donation of the deceased's organs.⁴⁶ There are many reasons why this occurs, even if the deceased has made his or her wishes to donate clearly known during life. The family may be traumatized emotionally and psychologically by the sudden death of their loved one and therefore unable to consent to organ removal; the family may fear that authorizing organ removal after death is symbolic of giving up hope of recovery if the patient is still alive; and the family might deny that the patient is actually dead as a result of a still-functioning heart or other functioning bodily systems, although the patient is actually brain dead.⁴⁷

A third problem, and one that the Commissioners attempted to address through revisions to the UAGA, was medical personnel's failure to ask the next

44. *Id.* at 428-29.

45. HUMAN ORGAN TRANSPLANTATION: A REPORT ON DEVELOPMENTS UNDER THE AUSPICES OF WHO (1987-1991) 8 (World Health Organization ed., 1991).

46. Kurnit, *supra* note 8, at 429. Recall that, although the 1968 UAGA did not require the consent of the next of kin, many doctors would seek it. Notwithstanding the legal immunity provided to physicians acting in accordance with organ donor cards, physicians include the next of kin in the decisionmaking process to avoid harm to their reputations or the reputation of the medical community in general. Monique C. Gorsline & Rachelle L. Johnson, *The United States System of Organ Donation, The International Solution, and the Cadaveric Organ Donor Act: "And the Winner is . . ."*, 20 J. CORP. L. 5, 32 (1995).

47. Kurnit, *supra* note 8, at 429.

of kin whether they would agree to donate the deceased's organs.⁴⁸ This problem is widespread; many, if not most, physicians either feel that the family should not be approached with the subject immediately following the death of a loved one or are inadequately trained in how to handle such a delicate situation.⁴⁹ Additionally, if the physician does seek the request of the family and it is refused, the organs generally will not be harvested, even if the deceased possessed a valid organ donor's card.⁵⁰ The Commissioners attempted to deal with these problems—especially that of the physician's failure to request donation—with the 1987 revisions to the UAGA.

B. The 1987 Uniform Anatomical Gift Act

The 1987 revisions to the UAGA made two important changes. First, the revisions expressly prohibited the sale of human organs for transplantation purposes.⁵¹ This section of the Act reads as follows: "A person may not knowingly, for valuable consideration, purchase or sell a part for transplantation or therapy, if removal of the part is intended to occur after the death of the decedent."⁵²

This change was important in that, for the first time, the sale of human organs was expressly prohibited. Second, the UAGA now included provisions for routine inquiry.⁵³ Under routine inquiry, a physician is required to notify the hospital of a potential organ donor.⁵⁴ A member of the hospital staff will then follow up by informing the family of its options concerning donation of the deceased's organs.⁵⁵

Many observers feel that routine inquiry has not adequately addressed the problems of the 1968 UAGA. As an alternative, they suggest the United States adopt a system referred to as required request. "[U]nder a required request system, an individual must indicate his wish concerning organ donation at

48. *Id.*

49. *Id.* at 430.

50. *Id.*

51. Brian G. Hannemann, *Body Parts and Property Rights: A New Commodity for the 1990s*, 22 SW. U. L. REV. 399, 410 (1993).

52. *Uniform Anatomical Gift Act 10(a)*, reprinted in LEGISLATIVE RESPONSES TO ORGAN TRANSPLANTATION 388, 409 (World Health Organization ed., 1994). Under the 1987 UAGA, "part" is defined as meaning "an organ, tissue, eye, bone, artery, blood, fluid, or other portion of the human body." *Id.* at 389.

53. Kurmit, *supra* note 8, at 418.

54. *Developments in the Law*, *supra* note 38, at 1620.

55. *Id.*

certain designated instances, such as driver's license renewal or submission of tax returns. . . ; [h]ospitals too could be required to ask about donation as part of the admissions process"⁵⁶ Proponents believed that required request could address the organ procurement problem by institutionalizing the request, requiring that that inquiry be made by trained personnel.⁵⁷ Proponents argue that the large number of patients in waiting lists demonstrates the failure of routine inquiry.

Practical shortcomings have thwarted the UAGA attempts—in both the 1968 and revised 1987 versions—to increase the supply of organ donors. An initial problem in both versions concerns the inefficiency of donor cards. To show intent, donors must carry donor cards, but only three percent of organ donors are actually carrying their cards when they die.⁵⁸ An additional problem, as mentioned above, is that if the family refuses to authorize the removal of organs, physicians will not proceed, even if the deceased has a signed organ donor card.⁵⁹ Although routine inquiry was added in the 1987 UAGA to cure this ill, it also suffers from shortcomings. First, it is not always applied. If the physician makes a subjective judgment that the family is too distraught to be confronted with the inquiry, he may abstain.⁶⁰ A second drawback to routine inquiry is that by creating a system that requires the family to be asked about donation, the revision loses sight of the initial underlying purpose of the UAGA: to allow the individual to govern the disposition of his or her own body.⁶¹

The 1968 UAGA and its 1987 revisions were adopted in all fifty states and the District of Columbia.⁶² However, the organ shortage problem continues. It is apparent that a new approach is needed.

C. *The National Organ Transplant Act*

The federal government jumped headlong into the organ transplantation quagmire with the National Organ Transplant Act (NOTA), enacted by Congress in 1984 with two interrelated foundations: to make the sale of human

56. *Id.* at 1622.

57. James F. Blumstein, *The Use of Financial Incentives in Medical Care: The Case of Commerce in Transplantable Organs*, 3 HEALTH MATRIX 1, 5 (1993).

58. *Developments in the Law*, *supra* note 38, at 1619.

59. *Id.*

60. *Id.* at 1621.

61. *Id.*

62. Gene A. Pierce, *Introduction to STATUTORY REGULATION OF ORGAN DONATION IN THE UNITED STATES* v, v (R. Hunter Manson, ed., 1986); Gerike, *supra* note 28, at 813.

organs a federal offense and to announce that the U.S. system for organ procurement would operate as a system of voluntary donations.⁶³ The prohibitive provision reads:

Under subsection (a) of Sec. 301, it is unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce. Penal provisions are laid down in subsection (b).⁶⁴

Although Congress expressly prohibited the recognition of property rights in human organs, they exempted sales of replenishable tissues like blood and sperm from NOTA.⁶⁵ Because studies concluded that "society's moral values militate against regarding the body as a commodity . . .", Congress enacted NOTA to establish a commitment to altruism.⁶⁶

D. Criticisms of the U.S. System of Organ Procurement

Although the U.S. system of organ procurement has gone through several modifications, all changes and "improvements" share one thing in common: they all failed to increase the supply of organs. Statistics concerning organ donation show that people in the United States do not always practice what they preach. "[O]ver sixty percent of Americans claim they would donate their own organs and over eighty-five percent claim they would donate the organ of a loved one, yet only four percent of American citizens carry organ donor cards."⁶⁷

In addition to the myriad problems with the donor card system cited above, the ineffectiveness of the current system is also rooted in many logistical problems: emergency personnel often fail to discover written directives concerning organ donation; organ procurement agencies have inefficient procedures in obtaining donor referrals; organs are wasted because they are not placed in time; and death pronouncements are not communicated to the next of

63. Williams, *supra* note 14, at 330.

64. *The National Organ Transplant Act* (Pub. L. No. 98-507), reprinted in LEGISLATIVE RESPONSES TO ORGAN TRANSPLANTATION, *supra* note 52, at 388.

65. Gerike, *supra* note 33, at 814.

66. *Developments in the Law*, *supra* note 38, at 1622-23.

67. Gorsline & Johnson, *supra* note 46, at 8.

kin in a timely manner.⁶⁸ Most of these problems continue because the system currently in place offers no incentives for people to donate their organs prior to death. Rather, the system is triggered by the moment of death—the moment of grief—when authorities seek to discover whether the deceased had the intent to donate or whether the families feel that donation would or would not be objectionable. For a system to efficiently encourage donation, it needs to create incentives to make a rational choice to donate well before death.

Many suggestions have been made to improve or replace the current system. These ideas range from a system of mandated choice, the required request system, to a system where the surviving family is required to consent to the decedent's pre-death wishes.⁶⁹ Many countries have tried these systems of increasing organ supply as well as other systems not yet discussed. Unfortunately, none have shown any significant ability to solve the shortage.

IV. ORGAN PROCUREMENT SYSTEMS IN OTHER COUNTRIES

A. Introduction

Two systems of organ procurement have been examined thus far. The first was unregulated commercialization of bodies and their parts, exhibited by "body-snatching" and the murders by William Burke. This system allowed people to engage in free trade, but may generate terrible consequences. The second system is the one employed in the United States today. It does not allow the free alienation of the body or any nonreplenishable part thereof. Additionally, it does not allow organ harvesting absent the consent of the donor, the next of kin, or both. The above discussed systems claim to be concerned primarily with the individual's consent. At the opposite end of the spectrum are those systems that allow organ harvesting even in the absence of consent. These systems are implemented in China and in the European Union.

While in some limited instances the United States has allowed sale of body parts, the nations of Europe are virtually unanimous in the illegality of the sale

68. *Id.* at 31-32.

69. Anderson, *supra* note 8, at 269-70.

for profit of human body parts.⁷⁰ "The latest Western laws, particularly in Europe, indicate that a more preemptory social outlook has already developed, under which consent is no longer required before body parts may be removed from the dead."⁷¹ The systems in these nations are referred to as "presumed consent" systems. They too have failed to cure the organ shortage.

On the other extreme is the Chinese system, which possibly has engaged in horrific human rights abuses in allegedly executing prisoners in order to harvest their organs. Finally, this section will address the arguments of those who advocate a system creating a market in bodily organs. The advantages and disadvantages of commercialization will be considered.

B. Presumed Consent

Many European Union countries have adopted the "presumed consent" system for organ procurement.⁷² This system presumes the decedent has consented to the harvest of his or her organs following death unless that decedent has recorded his or her objection to such a harvest.⁷³ Presumed consent as a method of increasing organ supply was chosen over commercialization because "[t]rade in human organs is . . . inconsistent with the EU objective of a high level of consumer protection [and] the negative opinion of the European Parliament on commercialisation of organs is well known."⁷⁴ Other countries have also found favor with the system of presumed consent. Argentina, Brazil, Chile, and pre-war Yugoslavia have adopted this system as well.⁷⁵

Although the European Union chose a different system of organ procurement than the United States, the countries of the Union were confronted with many of the same problems as the United States. For instance, the people of Europe, much like the United States, overwhelmingly support organ donation, but few actually carry donor cards. In describing the problem, one European commentator noted:

70. SCOTT, *supra* note 1, at 3.

71. *Id.* at 24.

72. Austria, Belgium, Finland, France, Greece, Italy, Norway, Spain, and Sweden. Gorsline & Johnson, *supra* note 46, at 21-23.

73. Kurnit, *supra* note 8, at 418.

74. H.D.C. Roscam Abbing, *Organ Transplantation: Challenges for the EU*, in ORGAN AND TISSUE TRANSPLANTATION IN THE EUROPEAN UNION, *supra* note 6, at 20.

75. Gorsline & Johnson, *supra* note 46, at 24.

It is safe to claim that most people think that we have a moral obligation to help others in need. It seems equally obvious that organ donation is an instance of helping. However, in everyday morality organ donation could be better described as supererogatory: it is admirable if they do it, but we cannot reasonably expect people to do so.⁷⁶

This, as noted earlier, is the same problem experienced in the United States. The European Union's response has been to presume consent, thereby eliminating the necessity of carrying cards. One difference between the E.U. system and the U.S. system is the degree to which the systems rely on the autonomy of the individual. The United States system of encouraged voluntarism seeks a level of compatibility between people's moral beliefs, in supporting the idea of organ donation, and their personal actions, deciding whether or not to donate; by contrast many people in Europe feel the opposite.⁷⁷ Some Europeans feel "[t]he problem with the procedures for organ retrieval presently in use is that they want simultaneously to express the moral status of organ donation and to respect the opinion of the person."⁷⁸ Confronted with a choice between the morality of organ donation and the autonomy of the individual, European countries sacrificed the ideal of personal autonomy for a system of presumed consent.

Many variations of the presumed consent model are employed in the European Union. Some countries have adopted a weak system that inquires into the wishes of the surviving family.⁷⁹ Other countries have implemented a much stronger system; organs are removed the moment a patient dies if there is no known objection to the harvest from the deceased individual. In some countries this may occur regardless of whether the surviving family objects.⁸⁰ To see how variant operations of the presumed consent system work, the organ procurement systems of France, Belgium, and Austria will be examined.

76. G. Pennings, *Ethics of Organ Retrieval*, in *ORGAN AND TISSUE TRANSPLANTATION IN THE EUROPEAN UNION*, *supra* note 6, at 166.

77. *Id.* at 167.

78. *Id.*

79. See Gorsline & Johnson, *supra* note 46, at 21-24.

80. *Id.* at 21-22.

1. Presumed Consent in France

France adopted a system of presumed consent in 1976 by passing the Caillavet Law, under which "a person may 'opt-out' from donating organs simply by signing a writing to that effect."⁸¹ Specifically, the law states:

Organs may be removed for therapeutic or scientific purposes from cadavers of persons who have not, during their lifetime, indicated their refusal to permit such a procedure. However, where the cadaver is that of a minor or of an incompetent person, organs may be removed for transplantation purposes only with the authorization of the person's legal representative.⁸²

In practice, France is an example of a weak system of presumed consent. The procedure for harvesting organs under the Caillavet Law was set out in Decree No. 78-501 on March 31, 1978, and begins with the decision of potential donors as to whether or not to opt-out of the presumed consent system.⁸³ If the option of donation is not chosen, they, or anyone witnessing the patient's objection, may register the objection in a hospital register maintained for that purpose.⁸⁴ Prior to harvesting the organs, the physician is required to check the register to ensure there has been no objection.⁸⁵ Even if there is no objection recorded in the register, the physician is still prohibited from removing the deceased's organs if he learns of an objection through another writing or a third person.⁸⁶ This system requires that a reasonable effort be made to determine the individual's wishes—if there were any objections—but does not place a premium on seeking the wishes of the next of kin.⁸⁷

Today, some twenty years after its adoption, the Caillavet law may claim some meager success. The number of transplantations in France has steadily increased and the country now claims one of the top six rates of postmortem

81. Williams, *supra* note 14, at 338-39.

82. LEGISLATIVE RESPONSES TO ORGAN TRANSPLANTATION, *supra* note 52, at 199, 200.

83. *Id.*

84. Kurnit, *supra* note 8, at 421-22.

85. *Id.* at 422.

86. *Id.*

87. *Id.*

donors per million inhabitants among European countries.⁸⁸ However, these rates may not adequately reflect the results that a vigorous system of presumed consent would reflect. France's practice of inquiring as to the next of kin's wishes in 90.7% of cases causes this system to operate more like a voluntary system of organ procurement.⁸⁹

Even regarding these numbers, France's system has failed to achieve the goal of closing the gap on the organ deficit. In 1988, twelve years after the adoption of presumed consent, France transplanted 1,808 kidneys and had 4,075 patients on the waiting list; 555 heart transplants and 523 patients on the waiting list; 409 liver transplants and 189 patients on the waiting list; 67 lung transplants and 163 patients on the waiting list; and 43 pancreas transplants and 16 patients on the waiting list.⁹⁰ At least in France, presumed consent has failed to provide the organs needed.

2. *Presumed Consent in Belgium*

Much like the law in France, the Belgian law of presumed consent is watered down. Belgium implemented its presumed consent law in 1987 following its passage in 1986.⁹¹ Belgium's provision for the harvest of organs reads:

Organs and tissues for transplantation, and for the preparation of therapeutic substances in accordance with the conditions laid down in Section 2, may be removed from the body of any person recorded in the Register of the Population or any person recorded for more than six months in the Aliens Register, unless it is established that an objection to such a removal has been expressed.⁹²

88. *Id.* at 442.

89. *Id.* at 443.

90. Altman, *supra* note 5, at 168-170.

91. Kurnit, *supra* note 8, at 422.

92. LAW OF 13 JUNE 1986 ON THE REMOVAL AND TRANSPLANTATION OF ORGANS, *reprinted in* LEGISLATIVE RESPONSES TO ORGAN TRANSPLANTATION 133 (World Health Organization ed., 1994).

Individual objections to organ harvesting are registered through a computerized central Health Authority registry which is accessible to all transplant centers.⁹³ "Although, like the French law, the Belgian law allows doctors to remove organs without familial consent, in practice Belgian doctors also inform families of their option to refuse and ask if they object."⁹⁴

Like France, Belgium has experienced some success, though not complete. By 1990, total organs procured had increased by 183%.⁹⁵ However, some observers have noted that this increase could be the result of the increased number of medical and hospital programs participating in the transplant program as opposed to the actual system of presumed consent.⁹⁶ In 1988, Belgium had 342 kidney transplants with 803 patients waiting; 96 heart transplants with 34 patients waiting; 123 liver transplants with 35 patients waiting; 4 lung transplants with 4 patients waiting; and 5 pancreas transplants with 12 patients waiting.⁹⁷

3. *Presumed Consent in Austria*

Austria's system works in somewhat differently from those of France and Belgium. In operation, it is probably the closest thing to a pure system of presumed consent. The law in Austria reads much like the laws in France and Belgium.

It shall be permissible to remove organs or parts of organs from deceased persons in order, by means of their transplantation, to save the life or restore the health of another person. Such removal shall be prohibited if the physicians are in possession of a declaration in which the deceased person or, prior to his death, his legal representative, has expressly refused his consent to organ donation.⁹⁸

93. Kurnit, *supra* note 8, at 423.

94. *Id.*

95. *Id.* at 444.

96. *Id.*

97. Altman, *supra* note 5, at 168-170.

98. FEDERAL LAW OF 1 JUNE 1982 (Serial No. 273), *reprinted in* LEGISLATIVE RESPONSES TO ORGAN TRANSPLANTATION, *supra* note 92, at 132, 132.

In Austria, a doctor may remove organs in any instance where the deceased has not made known their objection; may proceed without consulting the next of kin; and, if the next of kin is reluctant to donate or refuses, may and often will ignore these objections.⁹⁹ Additionally, an objection must be made in writing to be proper legally; however, unlike in France, the physician is under no duty to make a reasonable effort to find these writings.¹⁰⁰

As a result of this pure system, Austria has fared much better than most other nations in procuring organs. Sixty cadaveric kidneys are retrieved for every one million persons; this rate of procurement is twice that of the United States and most other European countries.¹⁰¹ Although these results are often lauded as evidence that a strictly run system of presumed consent actually works in increasing the supply of organs, opponents argue the system is not responsible for the increase in organs. One observer notes: "If Austria's high rates of procurement were due only to its presumed consent law, one would expect it to outpace other countries in all categories of organs covered by the law. This, however, is not the case."¹⁰² As compared to France and Belgium, Austria's harvest rates are only slightly higher concerning livers, and are actually lower concerning hearts.¹⁰³ Although many proponents and opponents of presumed consent may agree that the Austrian system has increased the organ harvest, it still runs a shortage of organs. In 1988, Austria had 270 kidney transplants with 1,116 patients waiting; 46 heart transplants with 15 patients waiting; 32 liver transplants with 10 patients waiting; 3 lung transplants with 8 patients waiting; and 8 pancreas transplants with 12 patients waiting.¹⁰⁴

4. Advantages of Presumed Consent

Presumed consent appears to procure organs more effectively than other systems. France, Belgium, and Austria all have higher procurement rates than

99. Gorsline & Johnson, *supra* note 67, at 22.

100. Kurnit, *supra* note 8, at 423.

101. Williams, *supra* note 14, at 340.

102. Kurnit, *supra* note 8, at 445.

103. *Id.*

104. Altman, *supra* note 5, at 168-69.

the United States or other countries with systems of encouraged voluntarism.¹⁰⁵ The proponents of a presumed consent system stress its several advantages. The system eliminates many logistical and practical problems: the need to carry organ donor cards; the need for health care professionals to inflict further grief on family members by asking them to agree to a harvest; and, in countries like France and Belgium where doctors still involve the family, the problems caused by doctors who are reluctant to ask for consent and therefore get poor results.¹⁰⁶ Additionally, the system provides individuals with ample opportunity (at any time during their life) to register their personal objections to prevent organ harvest. Because the decision not to donate is made during a time of calm, rather than a time of grief and severe emotional distress, the decision made is more examined.¹⁰⁷

5. Disadvantages of Presumed Consent

Systems of presumed consent are not without their problems and criticisms. Like other implemented systems, the most pressing practical problem lies in their failure to increase organ supply to sufficiently eradicate organ shortages. The most pressing ethical problem with the presumed consent systems is its impairment of individual autonomy and freedom. An ideal system would address both problems by serving two goals: (1) increasing organ supply to eliminate the organ shortage, while (2) preserving maximum autonomy for the individual.

Presumed consent falls short of increasing supply because in practice it often operates much like a system of encouraged voluntarism; examples are France and Belgium where the wishes of the family are made known.¹⁰⁸ By contrast, proponents of the presumed consent system argue that the decision is taken out of the family's hands because the individual has ample time to register

105. Williams, *supra* note 14, at 341.

106. Kurnit, *supra* note 8, at 434-35.

107. *Id.* at 435.

108. This is not to say that a system of presumed consent is more desirous than one of encouraged voluntarism. Rather, advocacy lies with neither system as they both fail to procure a supply of organs as great as the demand.

an objection.¹⁰⁹ However, this would not seem to be the case. Under the presumed consent system, in countries such as France and Belgium, the family is, for all intents and purposes, granted an opportunity to halt an operation that would proceed without their objection—a decision that is no less traumatic than deciding whether to allow the deceased's organs to be donated.¹¹⁰ Also, the system may not have much impact on increasing donations because families who objected under the old system will still object under the new one.¹¹¹ Another criticism of presumed consent encompasses its impact on human rights abuses: “the poor, the uneducated, and the legally disenfranchised might bear a disadvantageous burden, and only the more advantaged groups would exercise autonomy, since only the more advantaged groups would be aware of their right to opt-out.”¹¹² Also, presumed consent eliminates the socially desirable concept and attitude of altruism.¹¹³ In addition, the danger is always present that a person who has registered an objection to organ removal will nevertheless have organs harvested from his or her body.¹¹⁴ This would more likely happen in systems of strict presumed consent where a doctor is not required to make a reasonable search to determine whether an individual has opted-out of the system. This unwanted removal is a serious affront to individual autonomy.

Many “[c]ritics of presumed consent feel that such a system is overly coercive and antithetical to the values of a democratic society since it appears to devalue freedom of choice.”¹¹⁵ This is especially apparent in the United States where opinion polls show a widespread dislike for and opposition to a system of presumed consent.¹¹⁶ It would seem the opposition in the United States to presumed consent comes not only from the public, but from the courts as well. In the United States, a presumed consent system is used for cornea transplants—a practice that has resulted in many lawsuits.¹¹⁷ “[I]n the most recent case of *Brotherton v. Cleveland*, the court held that the practice of removing corneas from the deceased's eyes without even examining the patient's

109. Anderson, *supra* note 8, at 259.

110. *Id.*

111. *Id.* at 260.

112. Williams, *supra* note 14, at 343.

113. *Id.*

114. *Id.*

115. Kurmit, *supra* note 8, at 436.

116. Anderson, *supra* note 8, at 261.

117. *Id.*

medical records . . . was an unconstitutional deprivation of property interests without due process of law."¹¹⁸

Europe is moving away from systems of presumed consent.¹¹⁹ Many people are inherently dubious of the notion that silence equals consent, especially when the practical result of such a system is removal of an individual's organs even when his or her objections are known.¹²⁰ Some have also argued that it is unwise to ignore the wishes of the family as they are the ones who will be emotionally impacted the most from this experience. Presumed consent fails to sufficiently recognize the importance of individual autonomy; thus, unless we are prepared to advocate control of the body by the state following death, we should seek the approval of families of the deceased rather than avoiding them.¹²¹

In summary, presumed consent systems (1) have somewhat increased the number of organs procured, and (2) caused many philosophical problems that need to be avoided to make a truly effective, efficient, and fair system of organ procurement.

C. Nationalization of Cadavers

Another method of procuring organs for transplant, albeit one seldom used, is the nationalization of cadavers. In the few countries that have adopted this method, very substantial human rights violations have occurred. The most common of these human rights violations occur when the state removes the organs of criminals by methods of state execution.¹²² An example of this sort of state-sponsored crime comes from Bosnia, where a Bush administration study reports that a Serbian internment camp doctor is alleged to have killed prisoners of war to remove their organs.¹²³

China provides an example of state-sponsored execution for organs. China has officially allowed the harvest of organs from executed prisoners since

118. *Id.* at 261-62.

119. Gorstline & Johnson, *supra* note 46, at 35.

120. *Id.* at 22.

121. Anderson, *supra* note 8, at 263-64.

122. Williams, *supra* note 14, at 323.

123. *Id.* at 324.

1984.¹²⁴ By Chinese law, harvest is allowed in one of three circumstances: (1) if the prisoner's body is not claimed; (2) if the prisoner has consented; or (3) if the prisoner's family has consented.¹²⁵

China, however, has not always adhered to its own laws. Executions of condemned prisoners appear to be scheduled around transplant needs and, in some instances, even deliberately botched so the prisoners will still be alive when their organs are removed.¹²⁶ The carrying out of state-sponsored executions without public notice or witnesses facilitates China's ability to execute prisoners for the purpose of obtaining their organs.¹²⁷

Although many of the China stories sound incredible, they are not without support. Numerous reports of these practices have been confirmed not only by doctors and judges witnessing the executions, but by members of the Chinese Communist Party as well.¹²⁸ A Chinese government document explains the procedures to be used in this practice which harvests 2,000 to 3,000 organs per year.¹²⁹

The use of the corpses or organs of executed criminals must be kept strictly secret, and attention must be paid to avoiding negative repercussions. [The removal of organs] should normally be carried out within the utilizing unit. Where it is genuinely necessary, then with the permission of the people's court that is carrying out the death sentence, a surgical vehicle from the health department may be

124. Laura-Hill M. Patton, *A Call for Common Sense: Organ Donation and the Executed Prisoner*, 3 VA. J. SOC. POL'Y & L. 387, 425 (1996).

125. *Id.*

126. Allison Owen, *Death Row Inmates or Organ Donors: China's Source of Body Organs for Medical Transplantation*, 5 IND. INT'L & COMP. L. REV. 495, 495 (1995).

127. Patton, *supra* note 124, at 426.

128. Owen, *supra* note 126, at 496. Recently, Harry Wu, a human rights activist who has spent several years in Chinese prisons, released a videotape of Chinese nationals bargaining for the sale of organs of executed Chinese prisoners for tens of thousands of dollars; this videotape led to the arrest in early March, 1998 of two men, one of whom was a former Chinese prosecutor. See Christine Gorman, *Body Parts for Sale*, TIME, March 9, 1998, at 76.

The idea of bartering for the organs of prisoners has, in fact, begun to find limited support in legislatures in the United States (although not of the same sort of conscription system as is found in China). An example of this is the "Life for a Life" bill recently introduced in the Missouri state legislature. This proposal would allow "death row inmates to donate a kidney or bone marrow in exchange for a commutation to life in prison;" however, the bill was rejected by the House Criminal Law Committee by a 13-2 vote. "Life-for-a life" Bill Dies in Missouri House Committee, JOPLIN GLOBE, April 10, 1998, at C1.

129. Owen, *supra* note 125, at 496.

permitted to drive onto the execution grounds to remove the organs, but it is not permitted to use a vehicle bearing health department insignia or to wear white clothing. Guards must remain around the execution grounds while the operation for organ removal is going on.¹³⁰

Because the process of harvesting organs from prisoners is shrouded in absolute secrecy, it is impossible to accurately estimate how many organs are procured each year in China's system. However, even if a system of nationalization was able to close the gap between organs needed and organs supplied, killing human beings for their organs is no solution to the problem. The ends do not justify the means. China is a member of the United Nations and a signatory to the U.N. Charter and "the act of taking organs from prisoners without their consent is not consistent with the purposes and principles of the Charter."¹³¹ It is painfully obvious from the experience in China and Serbia that nationalization as an organ procurement plan should be completely avoided.

D. Commercialization of Human Organs

The antithesis of nationalization is commercialization of human organs—creating a market-based system of organ trade. Across the globe, the sale of human organs is considered an unethical practice.¹³² The ramifications of commercialization are discussed at greater length in the proposal section, which advocates a limited commercialization of organs.

V. PROPOSAL

A. Introduction

Despite various methods of organ procurement throughout the world, organ shortages expand and it appears they will continue to do so. This is partially due to the increasing pace of developing new medical technologies and in enhancing existing technologies. In the last decade, the development of organ transplantation has progressed so rapidly that today transplants are considered

130. *Id.* at 496-97.

131. *Id.* at 502-03.

132. Gorsline & Johnson, *supra* note 46, at 28.

more a matter of public expectation than medical marvel.¹³³ To cite one example, the incidence of organ transplantation rose in France from 685 in 1980 to 3,221 in 1992.¹³⁴ While the need for organs continues to increase, procuring organs remains a difficult, almost stagnant, task. One reason for the impasse is the low number of donors. Potential donors are only a small percentage of the total medical patient population and are therefore often lost in routine patient care.¹³⁵ Such obstacles are fatal to the success of any organ procurement system. When the system fails to reach potential donors, their organs remain in the buried cadaver and the potential to save a life is wasted. The organ transplantation problem is a shortage of available supply, not one of potential supply. "[T]here are more than enough deaths of potential donors in the United States—20,000 of two million deaths per year are of potential donors."¹³⁶ A system is needed to efficiently harvest these organs.

Many ideas have been suggested to improve the current system. An example is the UAGA's revision to include routine inquiry. One illustrative step requires physicians to reach out to these patients in an educational effort to aid in the "recognition and referral of potential organ donors to the organ procurement network."¹³⁷ However, even these referrals will not solve the shortage of organs if the correct system is not in place. If the current U.S. system were to be used, donors might be made more aware of organ donation, but that would do nothing to help change or override the concerns that prevent people from donating today. The current system is the problem and it will not be rehabilitated by further tinkering; a new system is needed.

For any organ procurement system to be successful, it must allow for the acquisition of enough materials to meet the demands of the community.¹³⁸ The current systems have failed at this goal of maximization; a reason for this is the failure of the laws which govern these systems. Acute and persistent shortages

133. P. Romano & J. Hors, *The Transplant European Computer Network Project*, in *ORGAN AND TISSUE TRANSPLANTATION IN THE EUROPEAN UNION*, *supra* note 6, at 117.

134. *Id.*

135. Luke Skelley, *Practical Issues in Obtaining Organs for Transplantation*, in *HUMAN ORGAN TRANSPLANTATION*, *supra* note 29, at 262.

136. Callender, *supra* note 29, at 46.

137. Skelley, *supra* note 135, at 262.

138. See SCOTT, *supra* note 1, at 82. See also RICHARD A. EPSTEIN, *ORGAN TRANSPLANTATION: OR, ALTRUISM RUN AMUCK* 5 (1993).

of organs represent the inadequacy of existing laws.¹³⁹ The challenge then remains one of determining the best method of increasing the supply of organs while remaining true to the second goal of organ procurement: avoiding human rights abuses and encroachments on personal autonomy.

While medicine advances and the organ deficit continues to grow there is reason to believe the true shortage may be worse than most think. One commentator notes that the majority of liver transplantations are performed in children with congenital defects and may be expanded to include tens of thousands of potential patients if liver transplantation should prove to be an effective therapeutic option for adults with cirrhosis of the liver.¹⁴⁰ Problems like this will require new, innovative solutions.

As previously mentioned, another drawback of the current U.S. system is the inequity that arises under organ rationing since rationing mechanisms and criteria used are wholly inadequate.¹⁴¹ Deciding who lives and who dies based on criteria—such as education and employment background—should be troubling. Organ procurement policies in the United States do not successfully work toward the goals which a procurement system should. The forces of altruism work too spasmodically to generate an adequate, sustained organ supply.¹⁴² It is crucial that a change in the system come soon.

B. The Middleman Approach

The most effective way to increase the supply of organs will involve limited commercialization of bodily components. The central idea to this approach is the existence of a middleman in the market of bodily organs. By contracting with individuals for their organs, this middleman entity will harness market incentives in order to acquire organs. Additionally, the regulation of this entity, especially during the process of organ distribution, will help ensure that no

139. SCOTT, *supra* note 1, at 82.

140. Arthur L. Caplan, *Sounding Board: Ethical and Policy Issues in the Procurement of Cadaver Organs for Transplantation*, in HUMAN ORGAN TRANSPLANTATION, *supra* note 29, at 273.

141. EPSTEIN, *supra* note 138, at 4.

142. *Id.* at 8.

rights violations occur. The proposed system will operate on a few basic principles.¹⁴³

1. The "middleman" entity would be licensed to purchase organs from individuals who are willing to sell. Only these entities, and no others, would be allowed to purchase organs.
2. The "middleman" entity would be the only entity from which a patient in need of a transplant could acquire an organ (excepting cases of altruistic gifts between live donors).
3. For organ procurement to operate on a global scale and avoid jurisdictional issues, these "middleman" entities would need to be private firms, licensed to procure and distribute organs.

An individual willing to sell his organs would contract with the organ procurement agency, authorizing the removal of the organ if the donor dies in such circumstances as to make removal possible for financial consideration.¹⁴⁴ This money should be paid only upon removal of the organ. This way, if the donor's organs are not made available for harvesting following death, actions by the middleman entity for restitution or specific performance may be avoided. In particular, specific performance should be considered untenable.

If specific performance is the remedy, society would be outraged that individuals would be forced to donate an organ. Not only is specific performance unethical, but it goes against public policy and cultural norms. Thus, if money is found to be the appropriate consideration for the sale of organs, then the

143. Note that these principles do not constitute an exhaustive list. They are merely general principles necessary to facilitate an increased supply of organs through a limited market.

144. Williams, *supra* note 14, at 348.

money should be paid upon the removal of the organ, and not during the life of the donor.¹⁴⁵

Following the contracting individual's death, the contract would be implemented by removing the organs from the cadaver; the organ data would then be entered into a central registry computer network, facilitating matches between donors and donees.¹⁴⁶ The organ procurement agency would then be responsible for distributing the organs to those in need. Organ distribution would be determined as a result of altruistic criteria, not financial incentives. This would prevent the wealthy from outbidding others to obtain organs from the middleman agency.

These agencies would be private firms licensed by the government of each country in question to operate as organ "warehouses"; centers of buying and distribution. These firms would need to operate on a global level to minimize rights violations and bartering in countries with different systems.¹⁴⁷ In the absence of a universally accepted organ procurement system the black market will continue in any country which chooses to operate a separate system.¹⁴⁸ The requirement for private agencies arises from the need to operate on a global level. If the middleman entity were a government agency, it would not be able to operate within the territorial boundaries of other nations. If a national of one state were injured in another, the home state would need a principle by which it could exercise jurisdiction.¹⁴⁹

Under any middleman system, a computer network would have to be centralized to match patient with organ before deterioration of the organ begins; it would also have to monitor the deaths of people with whom it had contracted.¹⁵⁰

C. Categories of Systems

The march of medical advances for organ transplantation is being impeded by feeble policy and deficient systems. The potential for eliminating the organ deficit may well depend more on progress in the legal aspects of organ donation

145. Altman, *supra* note 5, at 179.

146. *Id.* at 180.

147. Williams, *supra* note 14, at 321.

148. Altman, *supra* note 5, at 181.

149. Williams, *supra* note 14, at 352.

150. Gorsline & Johnson, *supra* note 46, at 38.

than on advances in medical technology.¹⁵¹ Any system of organ procurement must adequately fulfill the two goals set out previously: (1) maximizing organ procurement to a degree which eliminates the shortage of organs for transplant, and (2) avoiding unnecessary encroachments on individual autonomy as well as human rights violations. Only by achieving these two goals simultaneously, and not sacrificing one or the other, will the organ supply be increased in a manner that is both efficient and fair.

In essence, systems attempting to achieve these two goals create one of four results: they may satisfy both goals, neither goal, or one or the other of the goals. The only acceptable system is one that satisfies both goals. None of the existing systems achieve both goals; they all fall into one of the other three categories. Presumed consent systems neither cure the shortage nor protect autonomy; altruistic systems protect autonomy but fail to increase the organ supply; and regardless of whether or not they cure the organ deficit, conscription systems are not satisfactory due to their record of human rights abuses.

1. Presumed Consent Systems

The presumed consent system embraced by nations of the European Union achieves neither of the goals; the system does not eliminate the shortage of organs for transplant and, at the same time, it encroaches on the ideal of personal autonomy.

The first goal involves the determination of a factual question: is the number of organs collected sufficient to cover the number of organs needed? Under this system, the shortage has not been reduced. Statistics continue to show that more organs are needed than are donated.¹⁵² The ethical question of whether personal freedoms are being devalued requires a bit more extensive analysis since it does not turn on a numbers calculus.

Upon examination, it is apparent that the system of presumed consent encroaches on individual freedoms. Under presumed consent, silence equals consent to removing organs; in the event of an objection, organs might be removed anyway. This occurs in France and Belgium if a reasonable effort

151. S. S. Fluss, *Trade in Human Organs: National and International Responses*, in ORGAN AND TISSUE TRANSPLANTATION IN THE EUROPEAN UNION, *supra* note 6, at 74 (citing W.N. Gerson, *Refining the Law of Organ Donation: Lessons from the French Law of Presumed Consent*, 19 N.Y.U. J. INT'L L. & POL. 1013, 1013-1032).

152. Clark, *supra* note 8, at 930-31; Anderson, *supra* note 8, at 253.

search cannot turn up an objection; in Austria, even a reasonable effort search is not required prior to the removal of organs.¹⁵³ These nations have placed a low premium on the freedom of choice. In a sense they have arguably legalized a conscription of organs by espousing a public policy that presumes consent to organ harvest unless a donor makes a valid declaration otherwise.

Proponents of presumed consent might argue that the devaluation of individual autonomy is slight and is negated by the increased harvest of organs. Two responses are in order. First, the somewhat higher rates of organ donation under presumed consent systems versus altruistic systems are of little consequence; neither system is curing the problem of the shortage. Second, this position assumes that individual autonomy may be compromised somewhat to serve a “higher good.” An ideal such as freedom should not be treated as if it does not matter greatly if occasionally suppressed. Individual freedoms are extremely important; it is necessary to guard against any step, even if slight, that may lead to a slippery slope of other suppressions in order to procure organs. One commentator presented just this argument:

In the present context, the problem is not the motive of those who would assert rights or claims to our bodies. The highest motive will, typically be demonstrated—preservation of life and health and the cure of the sick. The need is to recognize danger when it is not intended, and to bring to bear a clear eye and an inquiring mind on proposals which directly affect our persons and liberties. Any new law that confers power over the human body, whether made by a legislature or by a court, has such an aspect and should give us pause.¹⁵⁴

This demonstrates the importance of protecting against encroachments, not because of any dangers presented by one with proper motives, but to guard against one who in the future may desire to use a system already in place for purposes not so pure.

153. See Kurnit, *supra* note 8, at 422-23.

154. SCOTT, *supra* note 1, at 99.

2. *Systems Based on Altruistic Principles*

Altruistic systems like the one in the United States achieve only one of the two goals: they preserve personal autonomy but fail to solve the organ supply problem. A system of altruism leaves the donation decision to the individual, but the effectiveness of producing maximum organ procurement is poor.¹⁵⁵ The organ shortage in the United States has been of such duration that organ transplant laws have been modified to increase voluntary donation.¹⁵⁶ However, these modifications have not cured the shortage and will not in the future. The problem is not the operation of the altruistic system; the problem inheres in the system itself. This system does not create proper incentives for increasing organ donation. Consequently, as altruism has failed to ameliorate the organ deficit in the past, we should not continue to rely on it to do so.¹⁵⁷

3. *Conscriptive Systems*

A conscriptive system may solve the shortage, but at the expense of violating human rights. China is an example of such a system. Due to the secret nature of organ harvesting, it is impossible to know how far-reaching this program is or just how many organs it can supply.¹⁵⁸ Not only is conscription likely to yield a large number of organs, it is theoretically possible the system may yield a surplus.¹⁵⁹ Under the conscription system a market for murder may be created akin to the "body-snatching" market in the early 1800s. The principal difference lies in the identities of the actors. In the body-snatching scandals, individuals were responsible; in the conscriptive system, the actor is the state. Due to the extensive human rights violations that result, conscriptive

155. Williams, *supra* note 14, at 336.

156. *Id.* It has been recently proposed that the laws be modified again. Secretary of Health and Human Services Donna Shalala has proposed consolidating all those in need of an organ transplant into a single national recipient list under uniform criteria; she also proposes that this national list should "allocate organs among transplant candidates in order of decreasing medical urgency status," so those in more dire medical situations will receive the first transplants. See Richard A. Epstein, *Sell Your Body, Save a Life*, WALL ST. J., Apr. 16, 1998, at A22. As Mr. Epstein points out, the risk in this policy lies in the fact that the sickest patients are the ones with the lowest survival rates and any such shift in policy to place them at the front of the line could lead to a waste of organ resources; rather, he proposes increasing the supply of organs through the use of a market system. *Id.*

157. EPSTEIN, *supra* note 138, at 1.

158. However, some data indicates that the number of kidneys and corneas procured is between 2,000 and 3,000. Owen, *supra* note 126, at 496.

159. A.H. Barnett & David L. Kaserman, *The Shortage of Organs for Transplantation: Exploring the Alternatives*, 9 ISSUES L. & MED. 117, 130 (1993).

systems must be strictly forbidden. The purpose of obtaining organs should be to save human lives. This purpose is not met when one human is murdered to let another live. Thus, conscriptive systems represent an arbitrary determination that the life of one person is worth more than another.

4. The Middleman System

The fourth and final category is comprised of middleman systems. Under middleman systems an increased supply of organs cures the shortage and people retain a maximum amount of individual freedom. As we have seen, the systems implemented today fall into the other three categories. The proposed middleman system is the only one that satisfies the twin goals of organ procurement systems. This system harnesses the financial incentives of a limited commercial market to increase supply. This requires an examination of the benefits of the open market.

D. Market Systems

The benefit of market systems lies in their ability to produce a sufficient supply of a commodity that is in demand. A free-market system uses the financial incentive of payment to encourage a sufficient number of individuals to sell their body parts.¹⁶⁰ In the market, the supply would be self-regulating because rising demand would raise the price of tissues in short supply and produce incentives for individuals to sell their organs; these prices would ensure that enough organs would be available to meet demand.¹⁶¹ A major problem with current organ procurement systems is their anathema to price incentives which could be used to increase organ supply. As one commentator notes: "[A] shortage in organs, like tomatoes or rental housing, is simply evidence of a malfunctioning market. No surprises here, just the usual unfortunate consequences—queues and intrigue—when markets are banned."¹⁶²

The use of a market system in human organs would operate on the same principles as many other markets. As such, it would increase the amount of organs available for transplant. This approach also places a very high premium on individual rights.

160. SCOTT, *supra* note 1, at 182.

161. *Id.*

162. EPSTEIN, *supra* note 138, at 8.

1. Advantages of the Market System

The biggest advantage of the free market is its ability to increase the supply of organs available for transplantation. As one commentator noted:

Don't ask whether you would sell your organs. You may be no more likely to do that than to commit murder. But just as criminal sanctions influence those closest to the edge, so too our organ markets will respond to those most likely to donate for a price.¹⁶³

This free market system enjoys its greatest popularity in the United States. Americans accept the market as an alternative to altruistic systems and the coercive power of the state.¹⁶⁴

In practice, offering payment for organs will increase supply. Not only will some form of payment entice people to override their discomfort at the idea of organ donation but it will also transform the donor card into a legally binding contract, resulting in an increased physician sense of comfort with following the wishes of the deceased rather than seeking the family's permission.¹⁶⁵ Markets are efficient mechanisms for transferring and allocating any good or resource; here, that good happens to be human organs.¹⁶⁶ This method of obtaining organs not only works on a theoretical level, but has worked demonstrably in practice as well. Today, nations which permit the sale of organs also procure the greatest number of organs.¹⁶⁷

The market system would ameliorate many of the problems inherent in current systems implemented in various nations. One advantage of the market system is that everyone in the equation benefits from the trade. This is different from systems of altruism where all the gains go in one direction, to the organ recipient, and all the losses go in the other, to the organ donor.¹⁶⁸ Proponents of the market system argue that compensation paid from the gainer to the loser is the best way to rectify the imbalance between the loss, borne privately by the

163. *Id.* at 10.

164. SCOTT, *supra* note 1, at 182.

165. *Developments in the Law*, *supra* note 38, at 1623-24.

166. Gorsline & Johnson, *supra* note 46, at 28.

167. Williams, *supra* note 14, at 322.

168. EPSTEIN, *supra* note 138, at 9-10.

donor, and gain, which belongs to society.¹⁶⁹ In a system where the net social gain reaches the transferor, the supply of organs should increase due to the increased gain achieved by selling as distinguished from donating.¹⁷⁰

2. *Disadvantages of a Market System*

Most opponents of the market system do not deny the market would increase supply. Rather, they argue that a market in bodily organs is unethical and will result in human rights violations. These arguments are philosophical rather than economic. The main reason given for opposing a free market in bodily organs is its alleged exploitation of the poor. One commentator notes: "Unfortunately, no well-regulated commercial market for human organs currently exists; those countries where organ sales are legal are among the worst violators of human rights and the exploitation of the poor."¹⁷¹ However, as this argument itself notes, the catalyst for these abuses is the lack of well-regulated markets. The market involved in the "middleman" proposal would be subject to strict regulations to avoid encroachments on human rights.

A second argument asserts that there are some commodities, e.g., organs, that should not be part of a market system.

[W]hen life and death issues are involved, we no longer rely solely on the market. Food stamps are given to those who cannot afford to buy their own food, emergency shelter given to the homeless when the temperature becomes dangerously cold, emergency medical care provided to the poor when they have no insurance.¹⁷²

It is true that financial incentives are used to induce individuals to sell to organ procurement agencies. It is equally true that rising prices will ensure that enough supply will be generated to cover demand. However, once the

169. *Id.*

170. *Id.*

171. Williams, *supra* note 14, at 345.

172. Anderson, *supra* note 8, at 295.

middleman possesses the organs altruistic criteria are used to determine who gets an organ—not just who can afford it.¹⁷³

Opponents also assert that commercial systems may reduce altruism in society. A sense of altruism can be a powerful force whereby the exchange of organs results not only in the saving of a life but in the binding together of society; allowing sales transactions for human organs may diminish people's respect for themselves.¹⁷⁴ Although the middleman admittedly exchanges monetary consideration for organs, altruistic criteria are used in distributing the organs from the procurement agencies (as long as there is a shortage). Perhaps this is an acceptable ramification for a system that eliminates the organ shortage and allows for personal autonomy, all while not completely devoid of altruism. Additionally, the tenets laid out for the operation of the middleman system specifically exempt live altruistic donations, like kidneys. Additionally, under any exchange the system does not require a person to sell organs if he or she wishes to donate them; it merely permits sales if desired.

Opponents of commercialization point out that transplant technologies have been developed and are supported with public funds and, therefore, financial success should not be a basis for receiving a transplant.¹⁷⁵ Once again, this argument is negated by the altruistic criteria used by the middleman system as long as there is an organ shortage. These arguments would be more effective if individuals on the street were permitted to bargain with one another for organs. However, in the regulated system proposed here, this would not be permitted. The market's advantages outweigh its disadvantages.

The market harbors a tremendous ability to increase the supply of organs by offering financial incentives to the individual. Since the individual is only allowed to sell to the middleman, and since recipients are only allowed to receive organs from the middleman based on altruistic criteria, the system artfully uses the incentives of the market to procure organs while eliminating arbitrary criteria in organ distribution. This system satisfies both goals of an organ procurement system (eliminate organ shortage and avoid rights encroachments). Moreover, this result can be accomplished in an efficient and

173. Of course, as previously mentioned, the middleman system envisages a future where no criteria will be needed to dole out organs. By increasing the organ supply through the financial incentives of the limited market eventually a point will be reached when supply equals demand. At that point, there will be no need to use criteria, altruistic or otherwise, in the distribution of organs.

174. Gorsline & Johnson, *supra* note 46, at 36.

175. George J. Annas, *The Prostitute, the Playboy, and the Poet: Rationing Schemes for Organ Transplantation*, in *HUMAN ORGAN TRANSPLANTATION*, *supra* note 29, at 332.

fair manner. Finally, a limited commercial system could be successfully implemented today. Markets in the United States for the sale of blood provide strong empirical evidence that a commercialization approach for organ transplants would work well.

E. The Blood Market Analogy

The buying and selling of blood is commonplace in society today. This was not always so. Once, ethical debate raged around whether the sale of blood should be allowed. Today, "[t]he tissue most widely bought and sold in the United States is blood. Payment is also made as a routine matter for urine, skin, and other body fluids such as sweat, saliva, and semen."¹⁷⁶ In addition, bodily parts such as hair and teeth have been objects of the open market for centuries in Europe.¹⁷⁷ The idea of blood for sale has been readily accepted by society. Today, there are more than 400 blood banks in the United States and that country's two billion dollar industry in exporting blood leads the world.¹⁷⁸

Blood, however, is slightly different in that it is treated as a service and not a product.¹⁷⁹ The purpose of this legal fiction is to avoid the imposition of strict liability or implied warranties of fitness of sellers of blood.¹⁸⁰ No arguments are advanced against the safety, efficacy, or desirability of placing blood on a market system.

The safety of the blood market is an important point when examining markets for nonregenerative organs. Many of the same unfounded criticisms of a market in organs parallel those made in opposition to a market in blood. One typical criticism is that purchased organs will exhibit a higher frequency of disease than donated organs; the same criticism was levied against sold blood.¹⁸¹ This criticism turned out to be fatuous.

A number of studies published in the late 1960's indicated that, compared to donated blood, patients who received blood from commercial sources exhibited a higher frequency of post-transfusion hepatitis. Yet a reevaluation of the data

176. SCOTT, *supra* note 1, at 190.

177. *Id.* at 180.

178. Wagner, *supra* note 35, at 945.

179. Gerike, *supra* note 33, at 814.

180. *Id.*

181. *Developments in the Law, supra* note 38, at 1624.

reveals that there was no necessary correlation between payment and the rate of post-transfusion hepatitis.¹⁸²

The defective blood was traced to blood centers located in areas where the population had a higher incidence of hepatitis and to inadequate screening technology.¹⁸³ "These limitations do not apply to screening potential organ donors because screening for inferior or infected tissue is relatively quick and inexpensive when the 'cadaver lies exposed in the hospital treatment room.'"¹⁸⁴

The experiences with blood demonstrate that many of the charges levied against an open market in bodily organs are baseless. Markets in organs can provide a supply of sorely needed organs in a safe and effective manner, much like the commercial market provides for blood needs.

VI. CONCLUSION

With the advent of organ transplantation in the 1950s and 1960s and the subsequent improvements in techniques and antirejection drugs, today's rates of success can truly be termed a medical miracle.¹⁸⁵ The success of organ transplantation can be viewed in the hard and fast terms of numbers of lives saved, as well as in the abstract terms of improvements in the quality of life enjoyed by organ recipients. If possible, these benefits should be made available to everyone; absent panacea, the medical community should strive to attain as closely as possible this mark. Medicine will need systems developed by the law to aid in its quest to achieve a sufficient supply of organs.

Unfortunately, rates of organ procurement remain substantially lower than the number of organs needed. Even more unfortunate is the fact that enough deaths occur every year to provide enough organs to satisfy the transplant demand. The very fact that organ procurement systems in place today do not adequately create incentives for people to donate their organs is evidence that the systems themselves are inadequate.

A new system is needed, one that commercializes organs in a global network. By allowing people to contract for the exchange of organs for monetary consideration, the market opens up financial incentives that increase

182. *Id.*

183. *Id.* at 1625.

184. *Id.*

185. See Kurmit, *supra* note 8, at 407; Silver, *supra* note 12, at 682.

the available supply of organs. At the same time, the use of a "middleman" agency will prevent individual bartering for organs and ensure that altruistic criteria are used to distribute the organ supply during an organ shortage. Only by taking this first step of commercialization can it be hoped that inroads may be made into decreasing, and eventually eliminating, the organ deficit.