A Free Market in Kidneys: Efficient and Equitable

WILLIAM BARNETT II, MICHAEL SALIBA, AND DEBORAH WALKER

ore than one thousand Americans die prematurely every year because they cannot get kidney transplants. In addition, more than forty thousand others suffer while waiting for kidney transplants (United Network for Organ Sharing 1999). Fortunately, this health-care problem—for those involved, a crisis and a calamity—could be virtually eliminated because its cause is clear and a solution is available.

The problem persists even though our medical knowledge and technology and our supplies of appropriately trained medical personnel and relevant equipment are more than adequate for the performance of the number of transplants that would eliminate it. The problem persists solely because of an insufficient number of transplantable kidneys, an insufficiency that exists because both the purchase and the sale of kidneys are criminal acts under the National Organ Transplant Act of 1984 (U.S. Congress 1984). Economists have shown that legalization of purchases and sales of kidneys would increase the number of kidneys available for transplant.¹ However, they maintain that although the increased number of kidneys available for transplant would reduce the magnitude of the current insufficiency, some insufficiency would remain (Adams, Barnett, and Kaserman 1999; Anderson and Barnett 1999; Barnett, Blair, and Kaserman 1992; Barney and Reynolds 1989; Blair and Kaserman 1991; Block

William Barnett II, Michael Saliba, and Deborah Walker are associate professors of economics at Loyola University New Orleans.

^{1.} Adams, Barnett, and Kaserman (1999) provide empirical evidence that the supply of kidneys would increase in a market situation. According to these analysts, "some estimates suggest that [human] organs would cost less than \$1,000 on a free market" (154), a necessary implication of which is that, in a free market, a substantial supply of kidneys would exist relative to the demand.

The Independent Review, v.V, n.3, Winter 2001, ISSN 1086-1653, Copyright © 2001, pp. 373-385.

1988; Carlstrom and Rollow 1997; Hansmann 1989; Kaserman and Barnett 1991; McKenzie and Tullock 1989; Rottenberg 1971; Schwindt and Vining 1986).

That the governmental prohibition of the purchase and sale of kidneys results in the unnecessary suffering and premature death of thousands of people is an undeniable truth. The obvious question is, Why does this prohibition remain in force? The literature provides three answers.

First, those who benefit from the current system prefer the status quo. Therefore, they engage in rent-seeking behavior to maintain the prohibition against the purchase and sale of kidneys (Barnett 1988; Barnett, Beard, and Kaserman 1993; Barnett and Kaserman 1995; Barney and Reynolds 1989).

Second, wealthy people who need a kidney would bid up the price of the limited supply in order to acquire one for themselves. Therefore, the "poor" would be priced out of the market and have to do without a transplant. Moreover, to allocate such an essential scarce good on the basis of wealth is morally repugnant (Barnett, Beard, and Kaserman 1993; Barnett, Blair, and Kaserman 1992; Blair and Kaserman 1991; DeJong et al. 1995).

Third, if a free market for kidneys existed, only poor individuals would sell kidneys, and such sales would be coercive in nature. A market for an essential body part in which only the poor would be the sellers, and coerced sellers at that, is morally outrageous (Barnett, Beard, and Kaserman 1993; Barnett, Blair, and Kaserman 1992; Blair and Kaserman 1991; DeJong et al. 1995).

We agree with the first answer, which is well developed in the literature. Our primary purpose of this paper is to refute the second answer by correcting the faulty economic analysis on which it rests. We also refute, with a more complete economic analysis, the third answer.

The Demand for Kidneys and Economic and Medical Shortages

It is necessary to distinguish two possible meanings of *shortage*. The first is the customary meaning in economics, which we refer to as an "economic shortage." The second, which we refer to as a "medical shortage," we define as a situation in which, regardless of whether or not an economic shortage exists, someone who needs a kidney transplant cannot get one because no transplantable kidney is available. The current literature explains why, without the prohibition against commercial transactions in kidneys, the economic shortage would be completely eliminated. However, it also maintains that because even in a free market the opportunity cost of the marginal kidney would, at some point, exceed the demand price, some people who needed a kidney transplant would still have to do without. Thus, although there would be no shortage in the economic sense, a medical shortage would exist.² This proposition is

^{2.} Obviously, if the quantity demanded equaled the quantity supplied at a quantity less than that necessary to provide a kidney for everyone who needed one, a medical shortage would exist despite the absence of an

the faulty analytical basis of the notion that with a free market for kidneys only the rich would receive transplants and of the normative conclusion that allocating such an essential scarce resource on the basis of wealth is morally repugnant.

The key point to be made here is that in addition to eliminating the economic shortage, a free market in kidneys, in conjunction with the current system of financing transplants, would also eliminate the medical shortage.³ That is, no person who could benefit physically from a kidney transplant would need to go without one.⁴ This outcome results from the conjunction of two factors. First, because only a tiny fraction of the more than 270 million Americans requires a kidney transplant, the need is extremely limited quantitatively. Second, the federal government is the de facto payer-of-last-resort for virtually all kidney transplants. Together, these two factors cause the demand curves for transplants and hence for the requisite kidneys to be truncated at a price greater than the opportunity cost of providing the marginal transplant and its requisite kidney.⁵ Consequently, the demand for transplants and hence for kidneys can be satiated.

economic shortage. Similarly, the use of a nonmarket system to allocate the kidneys procured through a free market necessarily entails that although the economic shortage would be eliminated, a medical shortage would persist. On these points, see Barnett and Kaserman (1995, 514); Barnett, Beard, and Kaserman (1993, 671); Barnett, Blair, and Kaserman (1992, 376); Kaserman and Barnett (1991, 57, 60–61); and Barney and Reynolds (1989, 17).

^{3.} Under current law, virtually all expenses not covered by private insurance are covered by either Medicare or Medicaid or both (*Your Medicare Handbook* 1995; *Medicare Coverage of Kidney Dialysis and Kidney Transplant Services* 1995).

^{4.} We do not assume that the subsidized demand for kidneys would be the same as the unsubsidized demand. Subsidization would probably increase the demand. However, we assume that then-current standards of the medical profession would determine who could benefit physically from a kidney transplant. It is possible that rent-seeking behavior by those in the transplant industry might result in liberal standards, but such a problem would probably be minor, and in any case the situation would be an improvement over the current situation. Therefore, only those who could benefit physically from a kidney transplant but, for whatever reason, chose not to have one would not receive one.

^{5.} It is theoretically possible that the federal government, in its role as third-party payer-of-last-resort, would set the subsidies for kidneys so that the demand curve would truncate at exactly that quantity at which the price equaled the marginal cost, and thus no rents would be generated. However, the likelihood of that event is virtually zero. To see why, consider, first, that if a significant fraction of Americans needed a kidney transplant, the price necessary to generate the requisite quantity of kidneys might be so high as to preclude the government's acting as third-party payer-of-last-resort in all cases. In that case, the demand and supply curves would intersect at a quantity less than that at which the demand curve truncates; the economic shortage would be eliminated, but the medical shortage would not be. Second, with the federal government acting as third-party payer-of-last-resort, it would set, de facto, the price of kidneys. Neither the politicians nor the bureaucracy would know the exact price that just equaled the marginal cost of kidneys at the exact quantity that would eliminate the medical shortage. The government, in setting the price, would have to weigh the costs and benefits of erring by setting the price too low against the costs and benefits of erring by setting the price too high. It seems obvious that the government would rather err by setting the price too high. In that case, the quantity supplied would exceed the quantity demanded, allowing the government to exercise a choice with regard to suppliers and providing a kidney to everyone eligible to receive one. If the government set the price too low, some eligible potential recipients would not receive a kidney. That outcome would not be politically palatable, as, no doubt, the "victims" would be both highly visible and highly vocal. Moreover, politicians and bureaucrats would have another incentive to set the price above the marginal cost, even if they knew it: the creation of rents. By setting the price above the marginal cost, rents would be created, and, as is to be expected in the political process, such rents would be dissipated to the benefit of the political class, as individuals engaged in rent-seeking activities in pursuit of those rents.

Our analysis is illustrated in figures 1 and 2. Figure 1 illustrates the situation in which the purchase and sale of kidneys are legally prohibited. The demand curve for kidneys when there is a third-party payer-of-last-resort is D_2 . At Q_{MAX} , the maximum number of kidneys medically needed, that demand curve is truncated (that is, the demand becomes perfectly inelastic) at a price greater than zero. The demand curve for kidneys when there is no third-party payer-of-last-resort is D_1 . Because some individuals who need kidneys are very poor, that curve meets the quantity axis at a price of zero, indicating that the marginal demander of a kidney would not be able to pay any price.⁶ The supply curve for kidneys (S_K) is truncated at the maximum quantity of donated kidneys; that is, it is perfectly elastic at the price of zero up to the maximum quantity donated, at which point it becomes perfectly inelastic. At the price of zero, there is *both economic and medical* shortage of kidneys equal to the difference between the maximum number of kidneys needed and the number donated ($Q_{MAX} - Q_{P=0}$). Finally, at the quantity of kidneys donated, the demand price exceeds the supply price, indicating the existence of rent and hence attendant rent-seeking behavior.

The reality today is that the demand for kidneys is subsidized because the federal government acts as a third-party payer-of-last-resort. Figure 2 illustrates the situation of a free market for kidneys in the presence of a such a third-party payer-of-last-resort. The demand curve (D_2) is the same, as in the case of the legally prohibited market for kidneys. However, the supply curve is different. It would no longer be truncated at the quantity of donated kidneys;⁷ rather, from that point on, the quantity supplied would increase in response to offers of higher prices. The market would "clear" in the sense that the quantity supplied would equal the quantity demanded at Q_{MAX} . However, at that quantity, the demand price would exceed the supply price, indicating the existence of rent and attendant rent-seeking behavior. However, because the market would clear at Q_{MAX} , there would be neither economic shortage nor medical shortage. Every person who needed a kidney could get one.

Figure 2 also illustrates the situation of a free market for kidneys in the absence of a third-Party payer-of-last-resort. The demand curve (D_1) is the same as in the case of the legally prohibited market for kidneys. And, again, the supply curve is different, as previously described. In this case, the market would clear where the quantity demanded equaled the quantity supplied (P_{MC}, Q_{MC}) , and no economic shortage would exist. At the market-clearing quantity, the demand price would equal

^{6.} The demand curve for kidneys without a third-party payer-of-last-resort (D_1) must lie below the demand curve for kidneys with a third-party payer-of-last-resort (D_2) , at least at the maximum number of kidneys needed (Q_{MAX}) . There would be no need for government to act as the third-party payer-of-last-resort if private charity were sufficient to assist poor and uninsured people who needed a kidney transplant.

^{7.} The free-market supply curve for kidneys (S_{K} in figure 2) is drawn as though the number of donated kidneys would not change with the advent of a free market for kidneys. In reality, the number of donated kidneys might increase, decrease, or remain the same. See note 16.



the supply price (P_{MC}) , indicating that neither rent nor rent-seeking behavior would exist. However, as the market would clear at a quantity (Q_{MC}) less than the quantity medically needed (Q_{MAX}) , there would still be a medical shortage equal to that difference $(Q_{MAX} - Q_{MC})$. Note, however, that even in this case the medical shortage would be smaller than that experienced in a regulated market.

Two additional points are relevant. First, the nonprice rationing system necessitated and mandated by current policy of allocating the relatively few donated kidneys is necessarily, at least in part, arbitrary and coercive and thus inequitable (Carlstrom and Rollow 1997; Blair and Kaserman 1991; Hansmann 1989).⁸ The literature indicates that certain groups in society are currently underrepresented among those receiving kidneys. These groups include the elderly, people with physical disabilities, people with mental disabilities, and minorities (Kifner 1988; Kjellstrand 1988; Held et al. 1988; Jonasson 1989). However, as A. L. Caplan (1992) has pointed out, "In order to know whether the distribution of organs for transplants in the United States is fair and equitable, it is not sufficient to look at data on who did and did not get transplanted [*sic*] in any given year. . . . All that any pattern of distribution proves is that there may be reason for concern about inequity. . . . [T]he real issues in thinking about fairness with respect to organ transplants are what reasons govern the policies that exist, whose values they reflect, and what means exist for challenging the policies and for holding those who enforce them to account" (162–63).

We have already demonstrated that in a free market for kidneys, all individuals regardless of race, age, and so forth—would be able to receive one. Therefore, if the current system is discriminating unfairly, a market for kidneys would correct this injustice.

Second, a free market for kidneys, in addition to supplying all that are needed, would increase the quality of the kidneys transplanted, as others have argued (Barnett, Blair, and Kaserman 1992; Blair and Kaserman 1991), as well as the quality of the entire transplant process.

In sum, the literature maintains that a free market for kidneys would increase the quantity of kidneys available for transplant, eliminate the economic shortage, and decrease but not eliminate the medical shortage. Therefore, an insufficiency of transplantable kidneys would remain, necessitating nonprice rationing. Moreover, the use of price as the rationing mechanism is seen as the source of inequity, the poor being priced out of the market. This conclusion is incorrect, as our analysis has shown. A free market for kidneys, combined with the current system in which government is the third-party payer-of-last-resort, would eliminate the medical shortage as well as the economic shortage, thereby *totally eliminating the need to ration kidneys*. Because

^{8.} The economic shortage created by the current system requires a non-price rationing mechanism in order to allocate each donated kidney to a specific recipient. Even if the criteria by which the kidneys are rationed were applied in a completely objective fashion, by their very nature the criteria themselves must be subjective and therefore to that extent arbitrary and inequitable.

everyone, poor as well as rich, who needs a kidney would get one, a free market for kidneys would be more equitable than the current system.

The Supply of Kidneys: Equity Considerations

As mentioned earlier, some contributors to the literature have called for a restriction on the sale of kidneys for ethical reasons, based on the plight of the poor in particular. We have already explained why a poor person would be able to receive a kidney if it were legal to buy and sell them, given today's reality of government as payer-of-last-resort. But there are other equity considerations to explore concerning a market for kidneys.

Human and Nonhuman Capital

The more human and nonhuman capital one inherits, and the more one develops such capital, the higher is one's potential material standard of living. Human capital consists of intellectual capital and physical capital. Although all three forms of capital (physical and intellectual human capital and nonhuman capital) are heritable, they are not all equally so.

Human capital can, to some extent, be passed on to one's family, friends, colleagues, and acquaintances, genetically and through personal example, education, and training.⁹ Such capital is, in some ways, very fragile and can be destroyed in an instant by physical or mental incapacitation or by sudden death. And, inevitably, it is annihilated upon one's death. At present, we know so little about the gene pool and how to manage it that the transfer of genes to one's descendants is beyond control. Moreover, personal example, education, and training are far from perfect guarantors of a successful transfer of intellectual capital, as most anyone with children can attest.

Nonhuman capital also can, to some extent, be passed on to one's family, friends, colleagues, and acquaintances.¹⁰ Nonhuman capital can also be destroyed (for example, by fire), or it can lose value by depreciating, in the case of real capital goods, or by a decline in market value, in the case of financial or real capital. Nevertheless, it would seem that, usually, it is easier to pass on nonhuman wealth than human wealth to one's heirs.

As the income one earns from one's human capital increases, it becomes possible to make substantial additions to one's nonhuman wealth and therefore to earn even greater income, of which an ever larger proportion would be attributable to nonhuman capital. Thus, in effect, one converts some human capital, particularly intellectual capital, into more durable and ipso facto less risky and more valuable capital.

^{9.} It can also be passed on, to some extent, to total strangers through one's writing and speeches.

^{10.} It can also be passed on, to some extent, to total strangers through gifts.

This conversion increases one's ability to make intergenerational transfers of capital. Moreover, income earned from human capital can be used to make intergenerational transfers in the form of payments for education, training, and health care for one's family members. Such processes are normal for the rich, increasingly common for the middle class, and rare for the poor. Therefore, the rich and the middle class are in a better position to convert human capital to nonhuman capital and hence to give their children a head start with respect to material standards of living.

The poor, by definition, have little capital, especially nonhuman capital and intellectual human capital. A relatively large part of their meager capital takes the form of physical human capital. It is quite likely that some poor people would avail themselves of an opportunity to convert some nonessential part of their least scarce and most fragile form of capital—physical human capital—into a more durable or more valuable form of wealth. However, the prohibition against the purchase and sale of kidneys forecloses that option to them, insofar as it involves the sale of a kidney. It effectively prevents them from making choices that they believe would increase their well-being (Blair and Kaserman 1991).¹¹ The current prohibition is paternalistic, and as such it is dehumanizing. Adults, because they are poor, are treated as if they are incapable of making decisions in their own best interest. Rather, government officials make onesize-fits-all decisions for them, with no knowledge whatsoever—much less personal knowledge—of them as individuals or of their individual situations and values.

Equity and the Current System

Of course, as with virtually all governmental interventions into the free market process, so also does intervention in the market for kidneys have a negative impact. And, just as such negative impacts are almost always felt most heavily by the poor—they of all members of society being the least able to protect themselves from the predations of government—so also in this case we would expect the poor to bear the brunt of the prohibition against the *sale* of kidneys.¹² That is, we would expect the poor, as a group, to participate relatively more than other groups as sellers in a free market for kidneys.¹³ Thus, the prohibition against the sale of kidneys may be depriving the poor of one of their more valuable opportunities to enhance their well-being and that of their families (Barnett, Beard, and Kaserman 1993; Blair and Kaserman 1991; Carlstrom and Rollow 1997).

^{11.} We are not suggesting that an individual be allowed to sell organs essential to life, health, or normal functioning. However, current law permits the sale of some nonessential body parts—hair and fingernails and even one essential body component, blood—though blood, of course, can be regenerated. Because only one functioning kidney is essential to a normal life, an individual with two healthy kidneys incurs only a minor risk to life and health from the removal of one kidney, whether for sale or for donation.

^{12.} Those who need a kidney but cannot get one under the current law bear the brunt of the prohibition against the *purchase* of kidneys.

^{13.} There is no reason to suppose that only poor people would sell kidneys. The decision to do so would be very subjective.

As we have shown, the thinking that underlies current kidney transplant policies is erroneous. Moreover, as others have shown, many of those who support the current policies do so because the policies benefit them, albeit at the expense both of those needing a kidney transplant but prevented from receiving one and of those willing to sell a kidney but prohibited from so doing, as well as of others.¹⁴

Finally, it should be noted that the current system also leads to such ethical horrors as the harvesting of body parts from unwilling providers, especially children.¹⁵

Kidneys and Risk

For most potential sellers of kidneys, the most significant cost would be the risk to life and health from having to live with only one functioning kidney. However, as explained earlier, the very existence of a free market for kidneys, in conjunction with a third-party payer-of-last-resort, would virtually eliminate such risk, thereby greatly reducing the cost of selling a kidney.¹⁶ Therefore, even if there is some truth to the argument that because "paid organ donors will always be relatively poor, and may be underprivileged and undereducated, the donor's full understanding of [the] risks cannot be guaranteed" (Sells 1993, 2983–84), the argument becomes moot when the risks are negligible for everyone who donates or sells a kidney.

To put this issue in perspective, consider that the state does not prohibit people, rich or poor, from voluntarily risking their lives and health in unremunerated endeavors such as sky diving, scuba diving, mountain climbing, or bungee jumping. In fact, some people are lauded for excelling at such endeavors. "If the rich who take risks for pleasure or danger money are not misguided, it is difficult to see why the poor, who propose to take risks for higher return, should be regarded as so manifestly irrational as to need saving from themselves. You might think . . . that the poorer you were the more rational it would be to risk selling a kidney" (Richards 1996, 386). Moreover, in some cases, the state not only allows people to place their lives and health at risk but actively encourages them to do so and then, in conjunction with the broader society, remunerates them financially or with approbation for risking their lives and health (for example, race car drivers, fire fighters, and police officers). In some cases, the state actually requires, under pain of severe penalties for noncompliance, that certain people place their lives

^{14.} For example, for some if not all of those who do receive kidney transplants under current policies, the quality of the transplant is suboptimal because they are prohibited from acquiring through the market a kidney that would be a better match than the donated one they actually receive.

^{15.} Vining and Schwindt (1988) state that "Handicapped Honduran children are allegedly being adopted for use in an international 'body parts' trade" (706). They cite "Babies Sold for Spares," *Vancouver Sun*, January 3, 1987, A4, as their source.

^{16.} What effect a market for kidneys might have on donations is unclear. The reduced risk resulting from the existence of such a market might induce some to become donors who otherwise would not have donated. However, the availability of remuneration might cause some who otherwise would have become donors to become sellers instead.

in great risk of extreme harm or even death and often at a significant financial cost to the individuals concerned. This requirement is imposed, of course, when the state itself expects to benefit. We have in mind conscripts, especially those in the infantry and other high-risk military jobs, especially in wartime. In the light of the foregoing observations, it is difficult to understand why it is objectionable for an individual to incur a negligible health risk¹⁷ through the sale of a kidney in order to earn income and, in the process, prevent a premature death and improve the life and health of a fellow human being. Certainly, in such a case the purpose served by the risky act of giving up a kidney is as noble as the purposes served by any of the aforementioned other risky actions.

Potential Problems

Surely there are potentially significant problems with a free market for kidneys, and therefore certain regulations may be appropriate. One potential problem would be the harvesting of kidneys from the bodies of unwilling people—which, of course, is much more likely to be a problem under the current system. At present, a wealthy person in desperate need of a transplant but unlikely to receive one because of a low ranking on the waiting list may be tempted to acquire a kidney illegally by theft from an unwilling "donor." In a free-market situation, such a temptation would not arise. Nevertheless, even in the free market, some evil people might acquire kidneys by theft from unwilling donors and then sell such ill-gotten kidneys to unsuspecting buyers. It would, however, be easy enough to design and operate a tracking system that, combined with a relatively low price for kidneys legally exchanged and with relatively high criminal penalties for such crimes, would eliminate this possibility as a source of concern.

Another potentially significant problem has to do with truly informed consent. Again, it would be easy to design and implement a system with built-in safeguards. Currently there are strict rules concerning informed consent to certain medical procedures. Such rules could be made applicable to the sale of a kidney. Further, a reasonable waiting period could be mandated.¹⁸ Such a system, when combined with the potential for malpractice suits, would provide protection against uninformed decisions and might well prove to be virtually foolproof.

^{17.} If the sole remaining kidney became impaired after an individual had sold a kidney, that individual could simply enter the market, financed if necessary by the payer-of-last-resort, and acquire a suitable replacement, save in the case that the impairment occurred so suddenly and was so serious that the seller died before a transplant operation could be performed, a most unlikely case.

^{18.} The well-established contract law dealing with one's capacity to enter into a valid contract could be applied directly, or it could be modified as deemed desirable before application—likewise for consumer-protection laws, the relevant parts of which could be applied to such sales. Obviously, such safeguards could and should be designed to prevent, inter alia, such decisions from being made under duress.

Allowing a legal market for kidneys might also create an increased moral hazard because current law, besides prohibiting purchases and sales of kidneys, makes the state the third-party payer-of-last-resort. Some people might be less concerned with the wear and tear of the kidney(s) they currently possess and therefore engage in behavior that would increase the risk of impairing their kidney(s), thereby increasing the likelihood that a transplant would be required, because they would know that if a transplant were to become necessary, the combination of the state as third-party payer-of-last-resort and a free market for kidneys would ensure that they would receive the needed transplant. Such moral hazard is insignificant currently because of the shortage of kidneys. However, it seems doubtful that this type of moral hazard would rise to such a significant level that we would be better off with the current system and with the unnecessary suffering and premature death it makes inevitable.

Conclusion

Current law that prohibits the purchase and sale of kidneys has inefficient and inequitable consequences. A free market for kidneys, in conjunction with third-party payers, would eliminate the negative effects of the current system. The economic and medical shortage of kidneys would be eliminated, and everyone who could benefit physically from a kidney transplant would receive one. No longer would more than a thousand people die prematurely each year for want of kidney transplants. No longer would tens of thousands of people suffer while waiting, many of them in vain, for a suitable kidney to become available by donation. No longer would necessarily arbitrary life-or-death decisions have to be made to determine the allocation of artificially scarce kidneys. And no longer would society's scarce resources be squandered in the political competition to gain control of artificially scarce kidneys and their attendant rents.

Moreover, a free market for kidneys would create positive effects. It would eliminate the current risk that those who provide a kidney for someone else might themselves later need a kidney transplant and because of the shortage of kidneys be unable to receive one. In addition to eliminating both the economic and medical shortages of kidneys, it would also give rise to market competition that would increase the quality of transplants, in every dimension imaginable, and of the transplant process, and increase the quantity of kidneys available for transplantation. (In addition to the kidneys becoming available in the market, it is quite possible that the existence of the market for kidneys would increase the quantity of donated kidneys by reducing the donators' risk.) People would be able to convert a nonessential part of their physical human capital into more valuable forms of wealth, both human and nonhuman.

The elimination of the negative effects of the constrained market and the creation of the positive effects of a free market for kidneys increase efficiency and enhance equity, suggesting that the current law is extremely detrimental to the well-being of our society and should be changed to permit a free market in kidneys. Sad to say, it is the current system of kidney procurement that is immoral, not the proposed free market for kidneys.

References

- Adams, A. F., A. H. Barnett, and D. L. Kaserman. 1999. Markets of Organs: The Question of Supply. Contemporary Economics Policy 17 (April): 147–55.
- Anderson, W. L., and A. H. Barnett. 1999. Waiting for Transplants. *The Free Market* 17 (April): 1–2.
- Barnett, A. H., T. R. Beard, and D. L. Kaserman. 1993. The Medical Community's Opposition to Organ Markets: Ethics or Economics? *Review of Industrial Organization* 8: 669–78.
- Barnett, A. H., R. D. Blair, and D. L. Kaserman. 1992. Improving Organ Donations: Compensation Versus Markets. *Inquiry* 29 (fall): 372–78.
- Barnett, A. H., and D. L. Kaserman. 1995. The "Rush to Transplant" and Organ Shortages. *Economic Inquiry* 33 (July): 506–15.
- Barnett, W., II. 1988. The Market in Used Human Body Parts. The Free Market 6 (November): 5.
- Barney, D., Jr., and L. Reynolds. 1989. An Economic Analysis of Transplant Organs. Atlantic Economic Journal 17 (September): 12–20.
- Blair, R. D., and D. L. Kaserman. 1991. The Economics and Ethics of Alternative Cadaveric Organ Procurement Policies. *Yale Journal on Regulation* 8: 403–52.
- Block, W. 1988. The Case for a Free Market in Body Parts. The Free Market 6 (March): 3.
- Caplan, A. L. 1992. If I Were a Rich Man Could I Buy a Pancreas? And Other Essays on the Ethics of Health Care. Bloomington and Indianapolis: Indiana University Press.
- Carlstrom, C. T., and C. D. Rollow. 1997. The Rationing of Transplantable Organs: A Troubled Lineup. *Cato Journal* 17 (fall): 163–77.
- DeJong, William, Jessica Drachman, S. L. Gortmaker, et al. 1995. Options for Increasing Organ Donations: The Potential Role for Financial Incentives, Standardized Hospital Procedures, and Public Education to Promote Family Discussion. *Milbank Quarterly* 73 (3): 463–79.
- Hansmann, H. 1989. The Economics and Ethics of Markets for Human Organs. *Journal of Health, Politics, and Policy and Law* 14 (spring): 57-85.
- Held, P., M. Pauly, R. Bovbjerg, J. Newmann, and O. Salvatierra. 1988. Access to Kidney Transplants. *Archives of Internal Medicine* 148: 2594–2600.
- Jonasson, O. 1989. Waiting in Line: Should Selected Patients Ever Be Moved Up? *Transplantation Proceedings* 21 (3): 3390–394.
- Kaserman, D. L., and A. H. Barnett. 1991. An Economic Analysis of Transplant Organs: A Comment and Extension. Atlantic Economic Journal 19 (June): 57–63.
- Kifner, J. 1988. Selecting Patients When Resources Are Limited: A Study of U.S. Medical Directors of Kidney Dialysis and Transplantation Facilities. *American Journal of Public Health* 78 (2): 144–47.
- Kjellstrand, C. 1988. Age, Sex, and Race Inequality in Renal Transplantation. Archives of Internal Medicine 148: 1305–309.
- McKenzie, R. B., and G. Tullock. 1989. The Best of the New World of Economics. Homewood, Ill.: Irwin.

- Medicare Coverage of Kidney Dialysis and Kidney Transplant Services: A Supplement to Your Medicare Handbook. 1995. Washington, D.C.: Government Printing Office, Publication No. HCFA 594B.
- Richards, J. R. 1996. Nephrarious Goings On: Kidney Sales and Moral Arguments. Journal of Medicine and Philosophy 21 (4) (August): 375–416.
- Rottenberg, S. 1971. The Production and Exchange of Used Body Parts. *Towards Liberty* 2: 322–33.
- Schwindt, R., and A. R. Vining. 1986. Proposal for a Future Delivery Market for Transplant Organs. *Journal of Health Policy and Law* 11 (fall): 483–500.
- Sells, R. A. 1993. Resolving the Conflict in Traditional Ethics Which Arises from Our Demand for Organs. *Transplantation Proceedings* 25 (6) (December): 2983–984.
- United Network for Organ Sharing. 1999. June 5. Available at: http://www.unos.org.
- Vining, A. R., and R. Schwindt. 1988. Have a Heart: Increasing the Supply of Transplant Organs for Infants and Children. Journal of Policy Analysis and Management 7 (4): 706–10.U.S. Congress. 1984. National Organ Transplant Act. In Life from Death: The Organ and Tissue Donation and Transplantation Source Book, with Forms, edited by P.G. Williams. Oak Park, Ill.: P. Gaines.
- Your Medicare Handbook 1995. 1995. Washington, D.C.: Government Printing Office, Publication No. HCFA 10050.

SUBSCRIBE NOW AND RECEIVE A FREE BOOK!



"*The Independent Review* does not accept pronouncements of government officials nor the conventional wisdom at face value." —JOHN R. MACARTHUR, Publisher, *Harper's* "*The Independent Review* is excellent." —GARY BECKER, Nobel Laureate in Economic Sciences

Subscribe to <u>*The Independent Review*</u> and receive a free book of your choice such as *Liberty in Peril: Democracy and Power in American History*, by Randall G. Holcombe.

Thought-provoking and educational, *<u>The Independent Review</u>* is blazing the way toward informed debate. This quarterly journal offers leading-edge insights on today's most critical issues in economics, healthcare, education, the environment, energy, defense, law, history, political science, philosophy, and sociology.

Student? Educator? Journalist? Business or civic leader? Engaged citizen? This journal is for YOU!



Order today for more *FREE* book options

SUBSCRIBE

The Independent Review is now available digitally on mobile devices and tablets via the Apple/Android App Stores and Magzter. Subscriptions and single issues start at \$2.99. Learn More.

Google Play

App Store



MAGZTE