

KIDNEYS FOR SALE

This year, more than seven thousand Americans will die waiting for an organ transplant. They will not die because physicians are unable to transplant organs or because their health insurance does not cover the cost of the transplant. They will die because since 1984, it has been against federal law to pay for human organs.¹ It is lawful to pay a man for his sperm, a woman for her eggs, and members of either gender for their blood. It is even lawful to donate an organ or to receive one as a gift. And it is certainly legal to pay the surgeons who perform the transplants. It is even lawful for hospitals to make a profit on organ transplants performed in their operating rooms. But it is against the law for you to sell a cornea or a kidney or a lobe of your liver; it is even unlawful for your loved ones to benefit from the harvesting of any of your organs after your death. And so seven thousand people die every year, waiting in vain for someone to donate an organ to them.

The transplantation of human body parts is not new. The first cornea was successfully transplanted in Austria in 1905. The first successful kidney transplant (between identical twins) was conducted in Boston in 1954. Since then, successful transplants of the pancreas, liver, heart, lung, hand, and even face have been performed. Indeed, there are now thirty-seven different organs and types of human tissues that can be transplanted. None of this is cheap. In the United States, a kidney transplant costs about \$250,000 on average, a liver transplant runs \$520,000, and a heart transplant costs an average of \$650,000. But there are services that arrange for international transplants (performed, for example, in India or China) of any of these organs at less than half the price. None of these

1. This legislation was originally introduced by Rep. Al Gore (D., Tenn.), who went on to become vice president of the United States (1993–2001).

figures include payment for the organ itself because such payments are illegal in the United States and in most other countries.

These astronomical sums are obviously out of the reach of most people. In fact, however, transplants done in the United States are generally not paid for directly by the recipients. For a person under the age of sixty-five with health insurance, private insurance pays for the transplant. For anyone sixty-five or older, the federal Medicare system pays for the transplant. And for people under sixty-five with neither private insurance nor the wealth to pay by themselves, transplants are paid for by the Medicaid system, which is financed jointly by the federal government and the states. (Neither private insurance plans nor Medicare or Medicaid will pay for international transplants, which are generally chosen only by relatively affluent people who are unwilling to wait—or to die waiting.)

Now, to begin our inquiry into the economics of organ transplants, let's consider the case of kidneys. We start here because the technical features of the transplant process have become relatively routine and because we each are born with two kidneys but can get by quite well with only one. In fact, thanks to the technique known as dialysis, humans can actually survive for years without functioning kidneys. In 2009, about eighty thousand people were awaiting kidney transplants in the United States. That same year, ten thousand Americans received transplants from deceased strangers. Another six thousand received a transplant from a living donor (recall that "extra" kidney we each have), usually a close friend or relative. Tragically, five thousand of the people waiting for a kidney either died or were dropped from the list because they had become too sick to qualify for a transplant. Another two thousand died that year waiting for a liver, heart, lung, or other critical organ. Could they be saved, if it were as lawful to pay for kidneys as it is to pay for the surgeons who transplant them? Or would a market for kidneys ultimately become a black market, relying on "donated" organs removed from unwilling victims by unscrupulous brokers motivated by cash rather than kindness? That is precisely the nexus of the debate over whether we should permit people (or the relatives of just-deceased donors) to be remunerated for lifesaving organ donations.

First things first: Surely we cannot object to a market for organs because the act of donating a kidney or the lobe of a liver is potentially hazardous to the donor. After all, we currently permit people to undergo such risks under the current system with *no* monetary compensation. If it is safe enough to allow friends or family to donate without payment, why is it too risky for someone to give up a kidney or part of his or her liver in return for money?

There are, of course, many other contentious issues. To start exploring them, let's look first at a nation where it *is* legal to pay people for

human organs: Iran, which just happens to have the highest living-donor rate in the world, at twenty-three donations per million people. Monetary compensation for organs in Iran has been lawful there since 1988, and in the ensuing decade, Iran eliminated the *entire* backlog of kidney transplant patients, something no other nation has achieved.

Under the Iranian system, a person awaiting a kidney must first seek a suitable, willing donor in his or her family. If none is forthcoming, the person must wait up to six months for a suitable deceased donor. At that point, the potential recipient can apply to the national transplant association for a kidney from a willing donor who is paid for the kidney. The donor receives from the government \$1,200 plus a year of fully paid health insurance and a payment of \$2,300 to \$4,500 from the recipient (or a charity, if the recipient is poor). Donor and recipient are also free to agree to an additional cash payment, although in most cases, the sums already mentioned are sufficient to get the job done. There are still purely altruistic donors in Iran, as well as cadaveric donations from the recently deceased. But it is the payment for organs that has permitted essentially all who seek kidney donations in Iran to get them, and the Iranian system has done so *without* leading to “back alley” donations or to people who are unable to afford a transplant because of the high cost of the organs themselves. Meanwhile, the system has saved the lives of thousands of Iranians.

Many people worry about a system of payment for human transplant because of the possibility that it would yield *involuntary* donors. That is, if there is a market for organs, some unscrupulous brokers might be tempted by profits to knock people over the head and harvest their organs for sale at the highest price. Yet it is generally agreed that the Iranian system has worked for more than twenty years without a hint of any such activities. Perhaps this should not be too surprising, given the medical techniques that have been developed to ensure that the tissue match between organ and recipient is close enough to make transplant feasible. These and other DNA tests can now quickly ascertain with substantial certainty that “organ A” came from voluntary “donor A” rather than from involuntary “donor B.”

Indeed, apart from gruesome works of fiction, most of the horror stories about the hazards of allowing markets for human organs are stories about behavior caused by the *lack* of a market for organs. In China, for example, many “transplant tourists” in the past received organs taken from the bodies of the thousands of prisoners who are executed there every year. China insisted that the prisoners’ organs were used only with their “consent,” a claim that many human rights groups have disputed. But on one point all agree: There were no payments to the prisoners or

their surviving relatives. The organs were simply taken (a practice now supposedly halted).

In both the United States and Britain, there have been highly publicized cases of what amount to "body snatching"—removal of organs and other body parts from the recently deceased. Some of these cases involved body parts used in research, while other body parts were intended for sale at a profit. In each of these cases, removal was done without the prior consent of the deceased or the postmortem consent of relatives. But this amounts to theft; it is singularly horrifying, but we must remember that it is theft. Consider another form of stealing: Every year many thousands of senior citizens are defrauded of their hard-earned retirement funds by unscrupulous individuals who masquerade as "financial advisers." Should we make it illegal for anyone to pay for investment advice—or should we devote our efforts to prosecuting and incarcerating the perpetrators of such crimes?

In Pakistan and the Philippines, there were small-scale markets for transplant organs until recently, although Pakistan has now banned the trade in human organs and transplants for non-Filipinos have now been outlawed in that nation. In both countries, there were anecdotes of donors who sold kidneys for \$2,000 to \$3,000 (about a year's worth of per capita income in either nation), but who later came to regret the transaction because of adverse long-term health effects. But this would be a potential issue even with unpaid donors, and in any nation such as the United States, donors in a market for organs would surely receive at least as much medical and psychological counseling as volunteer donors receive now.

Now, what about the added expense of allowing payments for donated organs? Would this break the budgets of Medicare or Medicaid or empty the coffers of the private insurance companies that pay for the bulk of transplants? In the case of kidneys, we have enough information from elsewhere to say the answer is probably not. In Iran, where per capita income is about \$12,000 per year, payments to donors smaller than this amount have been sufficient to clear the market for kidneys. In Pakistan and the Philippines, payments equivalent to a year's worth of per capita income were enough to support a substantial transplant tourist market in both countries.

At almost \$50,000 a year, average per capita income in the United States is clearly much higher than in any of these nations, suggesting that payments for kidneys would also have to be much larger to induce a substantial increase in the number of donations. But experts have estimated that even if the payment for a kidney were as much as \$100,000, private and public insurance systems (which, as we have noted, pay for almost

all of the transplants in the United States) could actually *save* money on many transplants because dialysis (at \$70,000 per year) and the other treatments associated with chronic kidney disease are so expensive.

It is true that allowing payments for human organs would almost surely increase the number of transplants each year—indeed, this is the very point. Payments would bring forth more organs, and this would in turn reduce deaths among people waiting for transplants. A payment system would have added costs associated with it: There would be more transplant operations (at \$250,000 each for kidneys, for example, plus another, say, \$100,000 for each of the organs themselves). Suppose that the payments for kidneys enabled an additional five thousand transplants per year (assuming that the U.S. system would be as successful as the Iranian system in eliminating the excess demand for kidneys). That would yield added costs nationwide of about \$1.75 billion (five thousand transplants estimated at \$350,000 each).

And there is a second cost: Paying for organs would cause a reduction in the number of altruistic donations. How many fewer there would be we cannot know for sure, but let us make two assumptions to be on the safe side. First, we assume that there would be *no* altruistic donations from living donors under a payment system. Second, we assume that the relatives of all deceased donors would insist on payment. Together these assumptions imply there would be an added expense of \$100,000 on each of the sixteen thousand kidney transplants performed under the current system. The added cost here would be \$1.6 billion a year, which, when added to the \$1.75 billion cost of the new transplants, yields a total added annual cost of \$3.35 billion for the organ payment system.

In return for this sum, we would surely recoup some savings from the dialysis system, because at least five thousand people a year would no longer be on dialysis at \$70,000 per year—they would instead have a kidney to do that work for them. Moreover, the current three- to four-year delay on kidney transplants would be sharply reduced, generating additional savings. But far more important, we would be saving the lives of five thousand people every year, at a cost per life saved of but \$600,000—and this number does not count any of the savings from reduced dialysis treatments.

All these calculations seem a callous way to view a human life. But by the standards of medical care of today, allowing payments for human organs is almost surely a safe and remarkably cheap way to alleviate needless suffering and save thousands of lives every year. And once this is clear, aren't the truly callous people those who would deprive human beings of that opportunity?

DISCUSSION QUESTIONS

1. Why might the owners of the private insurance companies that pay for most organ transplants be in favor of a system that prohibits paying for a donated organ? Should the taxpayers of the United States, who ultimately cover the cost of Medicare and Medicaid transplants, similarly be opposed to paying for donated organs?
2. If payment for organs drives up the financial costs of transplants, is it possible that private insurance companies, and even Medicare and Medicaid, might tighten their standards for transplants so as to reduce the number of transplants each year? If they do, who would gain and who would lose compared to the current system?
3. The average waiting time on transplant lists is three to four years for kidneys (although this is expected to rise sharply, due to the rising incidence of diabetes, a major cause of kidney damage). Many of these people waiting must undergo dialysis, at a cost of \$70,000 per year, paid for by private insurance, Medicare, or Medicaid. Suppose that if payment for organs were permitted, the transplant waiting time were shortened by three years, and that for the average patient, the result was eighteen months less on dialysis. At what price for a kidney would a system of paying for organs be a “break-even” proposition for insurers? Show all calculations, and explain your reasoning.
4. The United States currently has an “opt-in” system for organ donations from the deceased: People must explicitly choose postmortem donation ahead of time (as when they obtain their driver’s licenses). Many other nations have “opt-out” systems: A desire to donate post-mortem is presumed to exist unless an individual explicitly chooses ahead of time *not* to permit donation. How—if at all—would a shift to an opt-out system likely change the supply of cadaveric (post-mortem) donations?