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ARTICLE

Ethical Solutions to the Problem of Organ Shortage

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Abstract
Organ shortage is a major survival issue for millions of people worldwide. Globally 1.2 million people die each year from kidney failure. In this paper, we critically examine and find lacking extant proposals for increasing organ supply, such as opting in and opt out for deceased donor organs, and parochial altruism and paired kidney exchange for live organs. We defend two ethical solutions to the problem of organ shortage. One is to make deceased donor organs automatically available for transplant without requiring consent from the donor or their relatives. The other is for society to buy nonvital organs in a strictly regulated market and provide them to people in need for free.

Keywords: organ donation; organ markets; organ shortage; routine recovery; consent

The Problem of Organ Shortage

Globally, 1.2 million people die each year from kidney failure.[1] In the United States, over 100,000 people are on the waiting list to receive an organ.[2] While waiting, almost 10,000 people either die or are considered too sick to receive a kidney transplant each year.[3] In Europe, over 150,000 people are on the waiting list to receive an organ and 21 patients die each day waiting for a transplant.[4] In low- and middle-income countries, the problems are much worse. In India, more than 150,000 patients need dialysis each year and only 1 percent ever receive treatment,[5] and 160,000 patients are waiting for transplants but only 12,000 organs are available.[6]

How can we stem the massive loss of life and the human misery that this represents? There are roughly three ways to deal with the problem of organ failure. One is to prevent organs from failing in the first place, e.g., by combatting the growing obesity epidemic that is a leading cause of kidney failure. The second is to invent and implement better treatments for organ failure. Dialysis, which is used to treat kidney failure, is very expensive and patients on dialysis only have a 35 percent survival rate five years after the onset of treatment.[7] The third is to increase the supply of organs available for transplant. This can be done through the production of non-human organs (artificial or from non-human animals), the use of more deceased donor organs, and more donations from human living hosts.

In this paper, we will leave aside prevention, early treatment, and non-human organs, and focus on ways to increase the supply of human organs.[8] We will argue in favor of the automatic availability of all deceased donor organs and a regulated market in live organs.

In Section "Deceased organ donation: opt-in, opt-out, and mandated choice," we will discuss the two main competing models for increasing deceased donor donation in the world today, the opt-in and

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opt-out system, and a third contender, mandated choice. In Section "Deceased donor organs should be automatically available," we will present an alternative model, the automatic availability of deceased donor organs. In Section "The right to decide the fate of one's organs after one's death," we will deal with a pressing objection to the automatic availability model, that people should decide how their bodies are used after their death. In Section "Live organ donation," we will examine ways to increase the supply of live organs. We will discuss the prevailing model for procuring live organs in most states, which we call the model of "parochial altruism." We also discuss recent developments such as "paired kidney exchange" and the "advanced donation program," that are in place in a few jurisdictions. In Section "An ethical market in live organs," we defend our favored approach, a regulated market in live organs where the state is the sole buyer of organs and organs are allocated according to the need, not the ability to pay. In Section "Objections to a market in live organs," we deal with objections from both opponents and proponents of markets in organs.

Deceased Organ Donation: Opt-in, Opt-out, and Mandated Choice

What would a fair public policy on deceased donor donation look like? We will argue for the automatic availability of deceased donor organs. But let us first examine the three main alternatives, the opt-in system, the opt-out system, and mandated choice.

Most countries have an opt-in system, where people must explicitly declare their willingness to become donors through donor cards or the like. A problem with the opt-in system is that most people do not sign up to become a donor, sometimes for no other reason than that they never got around to it.[9] This leaves the relatives with the decision of whether to allow the organs to be made available for transplant.

To increase the number of donors, several countries, such as Spain, Austria, Belgium, Argentina, Wales, Scotland, and England, have therefore moved to an opt-out system, where the deceased donor organs are made available for transplantation unless the donor explicitly registers their objection prior to death. The opt-out system is therefore sometimes called "presumed consent."

A third option is mandated choice, where people are legally obliged to choose to be a donor or not, e.g., when applying for a driver's license or other official documentation.[10] The mandated choice is implemented in New Zealand and several states in the United States.[11] Proponents argue it is better than opt-out systems because it respects rather than presumes consent and that it solves the problem of inertia that plagues opt-in systems. However, whether it increases the number of donors is heavily context dependent. If people are asked about whether they want to donate an organ when queuing for a driver's license, they may say no merely to avoid being forced into doing something they have not properly considered, not because they are against deceased organ donation.[12] When Chile implemented a mandated choice system in 2010, it led to a 29 percent decrease in the deceased donor rates the following year.[13] The reason may have been that people were severely misinformed about the system, including that only rich people would receive kidneys.[14]

The primary reason to prefer opt out to opt in is to increase the supply of donors. However, proponents often point to another beneficial feature, that opt out better reflects the will of the donor. According to this view, people want to donate their deceased donor organs, but they nevertheless fail to sign up as donors. This view finds support in the substantial discrepancy in many countries between (the relatively low) number of people who sign up to become donors and the (much higher) number who in surveys report they want to donate their organs. Pointing to this discrepancy, David Price concludes that "presumed consent regimes apparently better reflect most individuals' true wishes as to the use of their organs in jurisdictions such as these."[15] Furthermore, since the people who want to take their organs to their grave can ensure that by opting out of the system, there is no violation of anyone's presumed right to decide whether to be a donor or not.

The deceased's relatives also play an important role in the opt-out system. On paper, there are two different opt-out systems, one "soft," where the family can veto the presumed consent, and a "hard" system, where relatives have no say in the matter. In practice, however, even in countries with "hard"

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opt out, practitioners often consult the family and let their decision take precedence over the presumed consent of the deceased.[16]

Although more deceased donor organs are donated in countries with opt out than opt in, critics of the opt-out system argue that moving to an opt-out system does not lead to a sustained increase in the supply of organs. They claim the apparent differences in donor rates are due to differences in mortality rates between countries and other measures taken by the countries that have adopted opt-out systems.[17] In addition, if we account for the reduction in people who want to donate live organs when an opt-out system is in place,[18] they claim the total effects on the supply of organs are negligible.[19]

Despite these criticisms, the most methodologically rigorous studies find a robust positive effect of out-opt systems on the supply of donors, even accounting for any reduction in the live organs that are donated.[20] There is, moreover, no indication that citizens in countries with opt-out systems react negatively to the presumptuous nature of the system. On the contrary, people have a higher willingness to donate their own deceased organs and to allow the procurement of their family members' organs in countries with opt-out systems than opt-in systems.[21]

Although the opt-out system is an improvement over opt-in and mandated choice, they share a fundamental flaw. In both systems, respecting peoples' say over their bodies and their families' bodies after their death takes primacy over increasing the supply of organs. Even in the best of systems, this leads to a shortage of organs. Spain, which implemented a soft opt-out system in 1979, is the country with the highest transplant rates for deceased donor organs in Europe.[22] But not even Spain is able to meet the demand for organs.[23] In 2021, approximately 7400 people are on the waiting list to receive a kidney, 1800 are waiting for a liver, and in 2019, 47 patients died while waiting for a new liver.[24] Chronic kidney disease is a leading cause of death in Spain, and one of the fastest-growing causes according to the 2016 Global Burden of Disease study.[25]

People's preferences are inappropriate as a "gate-keeper" for deceased donor donations. The proponents of an opt-out system implicitly or explicitly admit as much. They have already dispensed altogether with the notion of consent and preferences since the "presumption" is, well…presumptuous![26]

Deceased Donor Organs Should be Automatically Available

The automatic availability of deceased donor organs, also known as the routine recovery of deceased donor organs, entails organs that are automatically made available for transplant.[27] Neither relatives nor the donor of the organs needs to be consulted about their disposal. This would have several benefits. It would maximize the number of available deceased donor organs. This satisfies a crucial public responsibility, that is, providing people who suffer from organ failure with the best and most efficient treatment available. Furthermore, the automatic availability of organs would remove the need to place the burden of having to decide whether the organs should be donated or not on relatives in a distressing moment.[28]

There are several moral and political principles that support the automatic availability of deceased donor organs. Giving one's organs after death with the possible consequence of saving someone's life is arguably within one's duty of beneficence.[29] If morality demands anything, it demands that we make a very small sacrifice for the significant benefit of others.[30] Moreover, when the state is required to effectively coordinate the fulfillment of our moral obligations, it is arguably justified in imposing coercive measures to facilitate the effective fulfillment of these obligations.[31]

The automatic availability of deceased donor organs is also a rational insurance policy for the living. We all face the risk that we may one day need a transplant ourselves. Participating in a system that takes organs from the dead to give to the living, increases one's likelihood of living a longer and better life at a negligible cost to oneself. The automatic availability of deceased donor organs should therefore be endorsed by contractarians and contractualists, who argue we should abide by the principles it is rational (or reasonable) for people to agree to.[32]

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Are there nevertheless overriding objections to the proposal? One objection is often raised, that people have a right to decide what happens to their organs after their death.[33]

The Right to Decide the Fate of One's Organs After One's Death

It is better for others if our deceased donor organs are made available after our death. Nevertheless, we are not obliged to always do what is best for others. Indeed, often we have a right to act in ways that are contrary to the interest of others. Although it is better for people who suffer from chronic kidney failure if the healthy donate one of their kidneys while living, most people believe the healthy have a right to keep their kidneys.[34] Do people have a similar right to choose not to donate their organs after their death?

There are two main theories of rights: the choice theory and the interest theory.[35] Rights, according to the choice theory serve to protect the autonomy or self-determination of the right holder. In H. L. A. Hart's words, the choice theory makes the right holder "a small scale sovereign."[36] In short, rights protect our power to decide what other people can do with our bodies.

According to the interest theory, rights do not primarily function to protect our ability to choose but to serve the right holders' interests or their well-being broadly construed. If a person has a sufficiently strong well-being interest, that grounds a duty on others to respect, protect or even promote that interest.

The question is thus whether people have a right to choose what to do with their deceased donor organs, grounded in either the choice theory or the interest theory. Let us consider each theory in turn. One may think that the dead are harmed if their organs are harvested against their wishes, and that we, therefore, have a right on the interest theory to veto the harvesting of our organs.[37] However, according to Joseph Raz, there are two conditions for having a right. One needs to be the sort of entity that can have rights, and one's well-being needs to be "a sufficient reason for holding some other person(s) to be under a duty."[38] Although we have a strong interest in protecting our bodily integrity while living, we do not have interests that survive death. A precondition for there to be any interests at all is that there is someone for whom something matters.[39]

Intuitively, it seems more plausible that the choice theory can ground a right to choose what should be done with one's deceased donor organs after death. This is manifest in the argument that consent—from the deceased, or failing that, the surrogate consent of their next of kin or guardians—is necessary for the removal of organs from the deceased. However, consent does not serve the same function for the dead as the living. Consent normally serves to protect and facilitate autonomy and protect bodily integrity.[40] But the dead cannot make choices, they have no autonomy that can be protected or facilitated. Nor can their bodily integrity be violated. What matters for bodily integrity is not the mere interference with our bodies but that it happens against our consent. But since consent is meaningless when we are dead, so is the bodily integrity of the dead.

Even if we deny posthumous rights, could we not say that the living can have rights that extend to what happens after their death? The living certainly has interests and our interests as living beings extend to events that happen after our death. Many of the activities we pursue would lose their meaning if it were not for their place in projects that extend past our lifetime.[41] We also allow the living to make contractually binding agreements about how their wealth should be handled after their death, and these agreements cannot be violated just because the person is dead. Similarly, could we not say that people could make legally binding agreements about how their bodies can be used after their death?

However, we should not conflate legal and social conventions with moral rights. Bearing in mind that, as Shakespeare incontrovertibly observed, the dead are both beyond caring, and beyond our capacity to hurt or injure them. In Macbeth, Shakespeare observes dispassionately:

> Duncan is in his grave;
>
> After life's fitful fever he sleeps well;

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Treason has done his worst: nor steel, nor poison,

Malice domestic, foreign levy, nothing,

Can touch him further.[42]

We rightly respect the will of the dead, but only to the extent that to do so is necessary to respect the vital interests and moral claims of the living. We thus need to ask what values and morally acceptable purpose it serves to allow a dead hand to reach from the grave and deny sick people the use of their deceased donor organs when to do so cannot harm them or serve any morally defensible purpose.[43]

It is worth recalling that in most countries and jurisdictions a dead body must be "disposed of" in certain agreed ways: normally burial, entombment, or cremation, but sometimes embalming or cryopreservation. The human body cannot for long remain "intact" after death. As Shakespeare's Hamlet makes clear when talking of this process:

…Your worm is your only
emperor for diet: we fat all creatures else to fat us. And we fat ourselves for maggots: your fat king and your lean beggar is but variable service; two dishes to one table: that's the end.[44]

Disintegration of the body is the only real alternative to making deceased donor organs available for others. Automatic availability of organs will only entail that some parts of the body get to serve their function a little bit longer before they meet their inevitable fate. Thus, to give the living a right over how to dispose of their entire body, deceased donor organs included, serves no valuable function.

Even if it is in the interest of the living to have a say in what is being done to "their" bodies after their death, there is a further question about what weight we should put on this interest when it conflicts with other valuable ends. Recall Raz's second condition for having a right, that one's interest is "a sufficient reason for holding some other person(s) to be under a duty." There are ample examples where the interests of the community take precedence over what are people's rights. Examples are control of road traffic, quarantine for communicable disease, detention under mental health acts, safety guidelines for certain professional activities of HIV-positive people, and compulsory attendance for jury service at criminal trials.[45] If we sometimes can put the interests of the community over the autonomy and interests of the living, we should certainly do so when the "cost" is borne by the dead.

Of course, families that want to resist the compulsory taking of deceased donor organs may be distressed at the idea of the automatic availability of organs. These are people who *do* have rights and interests. However, we would fail to weigh the interests of the living properly, if we gave precedence to the interests of the bereaved over those who stand to lose their life from the shortage of organs, and indeed that of other families who may have to suffer grief prematurely as a result.[46]

Live Organ Donation

To make deceased donor organs automatically available would get us a long way to solving the problem of organ shortage. However, it is not sufficient. In an analysis of the United States, Philip J. Cook and Kimberly D. Krawieck estimate that "even a perfect deceased-organ consent-and-allocation system would have yielded only about 5500 kidneys in 2011, not nearly enough to cover the roughly 21,000 kidneys that are needed per year to satisfy unmet demand."[47] Furthermore, many people who die are elderly, and their organs last for a shorter period than organs from live donors. Particularly young people can live longer and better if they receive younger organs.[48] There is also a concern that an increased number of deceased donors will reduce the number of people who are willing to be live donors. If true, we have an additional reason for finding more effective ways to increase the supply of living organs than we currently have.[49]

We are not suggesting that people should sacrifice their vital organs. It is primarily non-vital organs, such as kidneys and livers, that are in short supply. Most donors live perfectly healthy lives after donating

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an organ. But there is a small risk involved in the procedure and its immediate after-effects. For kidney donations, the mortality rate is 3 in 10,000, and the morbidity rate is 10 percent.[50] However, the complications are minor in most cases where there are any at all.[51]

How do we get enough healthy people to accept a relatively small cost to themselves for the substantial benefit of those in need of an organ? There are several levers we could pull to get more people to donate. One is to provide better information about the costs and benefits of donation. People may not donate organs because they are misinformed, or they do not realize that someone they care about needs a transplant. A study suggests that one of the biggest barriers to live organ transplants is that the person in need does not know how to ask someone to be a donor.[52] There could also be an attempt to reduce the cost to donors (by making the procedure safer or guaranteeing follow-up treatment) and increase the benefits to the donor and recipient.

To frame organ donations as generous acts of altruism expected by loved ones is one way to increase the benefit to the donor. It facilitates praise by the community and gives the donors security in the conviction that they did the right thing. It also increases the cost of not donating. To frame donations as an extraordinary gift of life is the main mechanism currently in place for making organ donation a more attractive option for prospective donors. As Kieran Healy and Kimberly Krawieck show, this framing is not a spontaneous phenomenon. To convince a hesitant public "transplant professionals worked to reclassify a transaction once viewed as a ghoulish violation of nature and God's will into a valued and selfless "gift of life" that emphasizes both the satisfaction derived from charitable giving and the social and moral obligations owed to our neighbors."[53] Prohibition on monetary incentives, compensation, and payment is often considered necessary to support this framing.[54]

However, this system of "parochial altruism" has several problems.[55] Many people cannot find a willing donor and there are systematic differences in which groups receive a transplant and which do not. In Western countries, rich white people with high education have a much higher likelihood of finding a matching donor than others.[56] In the United States, despite an equal number of white and black patients on the waiting list for kidneys from live donors, 65 percent of recipients are white, and 12.5 percent are Black.[57]

The failure to meet the need for organs is partly a creation of "parochial altruism." Even if everyone can find a willing donor, one-third do not match their intended recipient due to "immune-system and blood-type incompatibility."[58] Suppose Ada needs a transplant and has a non-matching donor Harry, and Hortense needs a transplant and has a non-matching donor Ali. If Ada and Ali are a match and Hortense and Harry are a match, Ada and Hortense could both receive a kidney if Harry and Ali were willing to donate to the other. However, if everyone insists on donating to their loved one, the people in need do not receive the matching kidney. The system of "parochial altruism" thus gives rise to a matching problem.

The economist Alvin Roth and colleagues have developed an ingenious solution to this matching problem: the paired kidney exchange, which is in place in the United States and some countries in Europe.[59] The system organizes a kidney exchange between non-matching donors, such as Ada and Harry and Hortense and Ali. The paired kidney exchanges have been extended to include more pairs in long chains, as well as non-simultaneous matches. Furthermore, Roth and colleagues have proposed global kidney chains to further utilize the power of matching.[60] The latest extension of the paired kidney exchange system is the Advanced Donation Program, currently in place in the United States. In the Advanced Donation program, donors can donate a kidney now in exchange for a gift certificate that can be cashed in later.[61]

These innovations have saved many lives. Unfortunately, they are unable to meet the demand for kidneys. The most pressing problem is that participation in the paired kidney exchange depends on having a donor that is willing to swap their kidney with others. Thus, despite the introduction of a paired kidney exchange, thousands of people still die while waiting for new organs.

Before we present our favored proposal, a regulated market in organs, it is worth asking whether we should use a more heavy-handed approach to increase the number of organ donors. We argued above that we have an obligation to give our organs after our death to people who need them and that the

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government is justified in enforcing this obligation without the consent of either the deceased or their relatives. Could we not say the same about live organs? Since most of us can live perfectly healthy lives after a kidney or liver donation, we might have a duty to donate non-vital organs to the sick. And the government should enforce the fulfillment of our obligations, in the same way, they enforce our obligations to pay taxes.[62]

However, there are several reasons not to favor such a proposal. One is that it is difficult to see how the government could enforce such a duty without implementing a draconian system that violates people's basic rights. We could also question whether we have such obligations given the substantial cost involved in organ donation. Even if we have obligations to donate our non-vital organs to the living, the best system for doing so in a fair and efficient way is not a heavy-handed enforced donation. As we will go on to describe, regulated markets in organs allow for a flexible and fair way to allocate the burdens of fulfilling our obligations to people in need of organs.[63]

An Ethical Market in Live Organs

The developments discussed in the previous section raise the following question: Why do we not more fully utilize the power of the market to increase the supply of organs?

The paired kidney exchange is what economists call a barter market. While no money is changing hands, kidneys are traded for other kidneys in a system that is geared to preserve the veneer of non-commodification. The point of the paired kidney exchange is to get some of the force of markets without threatening the parochial altruism that the system supposedly relies on. The market logic is all the clearer in the Advanced Donation Program, which even relies on contracts that legally bind the parties to the agreement.[64] Although these quasi-market innovations have saved many lives, it is unlikely that one will attract enough donors if one does not take one step further and pay the people who supply the organs.

There are of course several concerns that arise if one uses markets to meet the demand for kidneys. Perhaps the most important is that the poor will not be able to afford organs, people who are desperate to pay their bills will drive down the price of organs in a race to the bottom, and global wealth differences will effectively make inhabitants of low-income countries into organ pools for inhabitants in high-income countries.

To avoid these concerns, we propose a strictly regulated market in live donor organs and tissue.[65] The market would be confined to a nation state or a union of countries, such as the European Union. Only residents within the country or union can sell and receive organs. The government, through a relevant agency such as the National Health Service in the UK, will be the only buyer and organs will be allocated according to need, not ability to pay. No purchases will be allowed outside the system and all the organs will be tested for HIV and other diseases.

Sellers of organs would in turn know they had contributed to saving a life and would be reasonably compensated for their time and the risk to their health. Prices would have to be high enough to attract people into the marketplace and to ensure a fair distribution of burdens between those who contribute to treatment by paying taxes and those who contribute in kind. One reasonable estimate for a fair kidney price in the U.S. context, proposed by Luke Semrau, is $100,000.[66] The price would of course have to vary with the income level of each jurisdiction.

In countries that fund dialysis for people who suffer from kidney failure, the program will fund itself through the massive savings on dialysis and other types of care that follow in its wake. In the United States, taxpayers spend $34 billion on dialysis.[67] It is estimated that every transplant saves taxpayers $1.3 million. Another $1.3 million can be gained when recipients can return to work and other beneficial activities.[68] An analysis by the UK's National Health System from 2009, estimated that the 23,000 people with a functioning kidney transplant saved the taxpayers £512 million and that one could expect £152 million in further savings if all 6,920 patients waiting for a transplant received a transplant.[69]

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Objections to a Market in Live Organs

Several objections have been raised against markets in organs, including a regulated market such as the one we propose here. Many of them concern the crowding out of parochial altruism, which we have seen is a core feature of the current system.

One concern is that the seller will no longer be motivated by altruism. If we pay people for their organs, more people would be willing to donate an organ to a stranger and if the need is satisfied by others, fewer family members will feel the pressure to donate an organ to a loved one. In Iran, the only country that has implemented a regulated market for kidneys, it is predominantly strangers who sell organs.[70] We should thus expect a loss of donations that are done from parochial altruism.

However, there is no reason to think that altruism in the morally relevant sense would be diminished by sale. First, there may be many reasons why people sell an organ. A father who sells a kidney to better care for his child does so for altruistic reasons, at least to the same extent as a father who donates a kidney to save their child.[71] Neither should we conflate sacrifices with goodness. It is better if someone who donates a kidney is compensated in return. It produces the same good results without exploiting the desperation of relatives. Although there is less of a net sacrifice and a corresponding loss in praiseworthy acts, we should not hold that against the regulated market. We do not after all regard medicine as any less a caring profession because doctors are paid.

Indeed, we can say something stronger. Society may even owe donors compensation for their sacrifice. Organ donors provide a crucial ingredient in what is the best treatment for organ failure. To the extent, we consider it a public responsibility to treat people for this, we should fairly compensate the people who play a central role in providing this treatment. It would arguably be wrong not to pay the health care personnel involved in the transplant. It is similarly wrong not to compensate donors.[72]

Some have argued that it could be degrading and demeaning to pay kidney donors. Given that many people believe that the donors are making an extraordinary sacrifice, a payment may not fully communicate the true value of the donation.[73] Although this may be true, it is not an argument against a regulated market. It rather suggests that one should do more than just hand over the money to praise the donors. One way to do this is to combine payment with a public ceremony where donors receive a prize, not merely monetary compensation.[74] This is merely one possible way to communicate the extraordinary value of donations to overcome concerns about degrading the true value of organ donations. Prohibiting payment, on the contrary, does nothing to communicate the societal appreciation of the act.

Although most objections to a regulated market come from people who oppose markets altogether, one can also raise an objection from the opposite side. Why limit the market to a nation-state or a union of countries? There are many people in the world who would appreciate the option to sell an organ for much less than $100,000. Our suggestion may thus be understood as a form of protectionism or national chauvinism in need of justification. Janet Radcliffe Richards has raised this objection. She writes:

> If it is presumptively bad to prevent sales altogether, because lives will be lost and adults deprived of an option some would choose if they could, it is for the same reason presumptively bad to *restrict* the selling of organs. Once you recognise that the default presumption is in favour of any such transaction, you should be reluctant to prevent any more sales than necessary.[75]

We admit that there are benefits to a global market that gives everyone a chance to sell an organ to improve their life. There are nevertheless several reasons to favor a regulated and nation-bound market. One is that it provides better control over the conditions under which people sell their organs, which makes it easier to avoid exploitation and undue pressure from creditors, family, and the like. The second is that it makes it possible to communicate what many take to be the true value of the act. The third is that it is very unlikely that citizens will favor a global market in organs making it unacceptable in democracies. A global market in organs is thus worse than a regulated market because it satisfies fewer of the relevant moral criteria of a successful policy proposal.

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Conclusion

We have argued in favor of the automatic availability of deceased donor organs and a regulated market for live organs. These measures should make good the lethal shortfall in donor organs in an ethical way that would not bring anything but credit to a decent and caring society.

The proposals we have put forward could be said to fail to secure support from the populace. Whether the arguments in favor of automatic availability of organs and an ethical market in live organs would fail to convince people is partly an empirical question, but it is an important one. In addition to a program of public involvement, education, and information to develop and make the case for these proposals, caution will have to be exercised before steps are taken toward pursuing these as policy options. However, we believe people over time will see the virtue of solving the problem of organ shortage in the rational and ethical way put forth in this paper. We hope, moreover, that the suggestions we propose will occasion a more constructive discussion of proposals for how to reform a system that is in vital need of change.

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