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Organ Donation: A Comparison of Altruistic and Market-Based Systems

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One of the most heavily-regulated aspects of the healthcare industry is the organ donation system (“Legislation and Policy”). Regulations in this area are intended to ensure the quality of the organs as well as the morality of the process through which they were procured. This system, however, is failing; the number of patients requiring organ transplants is increasing, but the number of donors remains stagnant (Gordon, Patel, Sohn, Hippen, & Sherman, 2014). Due to the lack of available transplant organs, critics and supporters debate whether the United States government should allow for the purchasing of transplantable organs. The United States government officially outlawed the purchasing of organs in the National Organ Transplant Act of 1984 (“Code of Federal Regulation”), making such purchases punishable by fines of up to \$50,000 and/or 5 years in prison (Friedman & Friedman, 2006). Skeptics of organ-buying point to the black market organ industry in India, which feeds on the desperation of the poor, to support their views, while those who support the purchasing of organs point to the thousands of patients who die waiting for kidney transplants annually in the United States. Supporters can also point to how Iran eliminated their waiting list for kidney transplants due to their organ-buying policies (Ghods & Savaj, 2006).

Before this debate can be analyzed, though, it is important to realize that these arguments are not absolute. The argument for an altruistic organ procurement system relies on the willingness of donors, but that does not mean

that non-financial incentives cannot be presented to increase this willingness. The current system is not functioning well, so many who do not support the idea of purchasing organs still believe that something in the current system must change in order to increase donations. Similarly, those who support a market system for organs do not necessarily support simply selling organs to the highest bidder. Instead, they support a set price for organs, and a combined private and public organization to oversee these matters, much like a blood bank (Brams, 1977). Some even believe that organs should only be allowed to be purchased after death (Brams, 1977). These views demonstrate that the moderate opinions on both sides of the organ-purchasing debate do not support the systematic exploitation of the poor for organs, or the death of thousands of Americans per year in keeping with the old system.

One of the main arguments for those who are against the purchasing of organs is that morally and culturally, Americans would not accept this practice. One of such critics' major concerns is that impoverished communities will be exploited for organs because of their vulnerable financial situation. Some argue that it is always the choice of the donor to donate, but others claim that undue inducement, in a way forces them into the situation. An undue inducement is an "offer that is too good to refuse . . . [and] makes people do something they would not otherwise do," because although such actions may not be directly unethical, they can "distort people's judgment, encouraging them to engage in activities that

contravene their interests” (Gordon, Patel, Sohn, Hippen, & Sherman, 2014, para. 3).

Those in favor of an altruistic system believe that not only is the practice of buying organs wrong, but it would also be ineffective. In a recent study, Gordon, Patel, Sohn, Hippen, and Sherman (2014) found that kidney donations are the most in-demand transplant procedure in the United States, and they determined the minimum amount that people would need to be paid to consider donation, what price point indicated undue inducement, and people’s general opinion on the purchasing of kidneys. The study found that the average minimum amount a person would have to receive to donate to a family member/friend was \$5000, and to donate to a stranger was \$10,000; they study also found that undue inducement was perceived to begin on average at \$50,000 for a family member/friend and \$100,000 for a stranger (Gordon, Patel, Sohn, Hippen, and Sherman, 2014). Their most important finding, though, was that 70% of those surveyed did not change their willingness to donate based on subsequent financial compensation, and 74% found it unacceptable to pay for organs (Gordon, Patel, Sohn, Hippen, and Sherma, 2014). This study’s results seem to demonstrate that Americans are not ready to make the shift into a market-based system of organ donation.

Another concern about purchasing or providing financial inducements for organs stems from the fact that many Americans fear that those of lower socioeconomic classes will be exploited, as is already the case in developing countries like India and Brazil. Nancy Scheper-Hughes, a Berkley anthropologist, observed the hardship and direct effects of organ purchasing on the impoverished in Brazil, leading her to argue that organ sales would permit “one relatively privileged population [to] claim property rights over the bodies of the disadvantaged” (Friedman & Friedman, 2006, para. 5). The possible social implications of this proposition have led many groups, including the American Society of Transplant Surgeons (ASTS), to voice negative opinion on the sale of organs. The ASTS in particular have stated their opposition to solicitation of organs from living and deceased donors: one of the problems that they point out is the way in which “solicitation is to redirect the donation to a specific individual rather than according to the fair policies of allocation (United Network for Organ Sharing policy on organ allocation)” (Friedman & Friedman, 2006, para. 6). There is concern that organs will not go to people on the top of the donor list, but to those with the best financial situation – a method of operation no different from the black market system.

The logical question that many pro-organ market advocates are asking is, what is the plan to bridge the gap between the donations on one hand, and the need for organs on the other? While some Asian countries have attempted to

bridge this gap through organs donated from living donors (Kim, 2004), many European countries and Singapore have implemented effective programs that utilize the organs of the recently deceased. The United States has also tried to increase its number of deceased-donor organ donations in the hopes of eliminating the constant need for live donors. This recent drive has been publicized through celebrity endorsements, public relations efforts, National Kidney Foundation efforts, and most effectively, advance permissions as secured and communicated through state driver's licenses. As a result of these efforts, the number of deceased-donor organ transplants has increased 32.5% from 1988 to 2004, and though this number does not nearly cover the increase in needed donations, it does show the effectiveness of these campaigns (Friedman & Friedman, 2006).

Singapore, as one country that has been able to significantly increase deceased-donor organ donations without either selling organs or promoting donor awareness, offers another potential method completely contrary to that in the United States. The Human Organ Transplant Act of 1987, which was amended in 2004, rules that when a Singaporean citizen dies, doctors can take any organs that they feel would be beneficial to another patient. The patient has the option to opt out of these donations, but instead of implying that the patient does not want his or her organs donated if not specified, the Singaporean system assumes that the organs are up for donation (Bagheri, 2005). This approach may be particularly

effective in America because 95% of Americans either “support or strongly support” organ donation, despite the fact that only 40% of eligible donors are registered (Siegel, 2014). If the number of registered donors in the US increased to 95%, the number of potential deceased-donor organ dominations would more than double. If a trend like that were to occur, America would follow the European trend of deceased-donor organ donations becoming on par with their living organ donations.

Those who support organ donations, though, may argue that doubling the number of registered donors without paying them is impossible. Here once again Singapore can be used as a plausible solution. The Human Organ Transplant Act of 1987 has a built-in incentive for organ donors: if a past donor needs an organ transplant in the future, they are prioritized above those on the waiting list who have not donated (Bagheri, 2005). There are many options besides monetary payment that can incentivize the sympathetic population to register as organ donors. Though the current altruistic system is not functioning well, this lack does not mean that the system cannot function with a few alterations, since those who are opposed to the selling of organs for transplantation simply want an effective transplant system that does not compromise the procurement process, ethically or morally.

In recent years, the idea of purchasing organs for transplants has been gaining traction. The current US system has more than 120,000 names on the transplant list, and on average 18 of those people die per day while awaiting an organ (Siegel, 2014). Not only is this current system ineffective, but it is also biased towards the rich. The most wealthy and unethical of those on the waiting list in the US will often fly to India and return home with a new organ, illegally purchased through an organ-harvesting ring overseas (Friedman & Friedman, 2006). The current American system also fails to compensate donors, who are going through extensive surgery out of the goodness of their hearts. Though the mortality rate of transplanting an organ is extremely low, somewhere around 0.03%, the morbidity rate is about 20%, and complications can range from pain, infection at the incision site, incisional hernia, pneumonia, blood clots, hemorrhaging, potential need for blood transfusions, and side effects associated with allergic reactions to the anesthesia (“Being a Living Donor”). Potential long-term side effects are even more extensive. For lung donations, possible side effects include intra-operative ventricular fibrillation arrest, post-operative pulmonary artery thrombosis, bronchopleural fistula, pleural effusion, empyema, bronchial stricture, pericarditis, arrhythmias, chylothorax, pneumothorax, hemoptysis, and dyspnea (“Being a Living Donor”). For kidney donations there is the risk of hypertension, kidney failure, and proteinuria; for liver donations, there is the possibility of bile leakage, hyperbilirubinemia, small bowel

obstruction, biliary stricture, portal vein thrombosis, pulmonary embolism, intra-abdominal bleeding, pancreatitis, bleeding duodenal ulcer, renal failure, gastric perforation, gastric outlet obstruction, and pleural effusion. Moreover, these long-term side effects have not been studied extensively, and could pose even more unknown risks in the future (Kim, 2004). These statistics complement the idea of a market-based organ system: the donor should be paid or remunerated for the fairly high risk of complications associated with donation, as a form of compensation for his/ her pain and suffering.

Though compensation for donors' pain and risk is a good reason for financial incentives in the organ transplant community, another common thought process is that the market system will increase the number of donors. Though thousands of financially-compensated black market organ transplants occur every year, the only country that legally allows the purchasing of organs is Iran. In 1988, a compensated and regulated living-unrelated donor renal transplant program was adopted by Iran; by 1999, the donor list for kidneys was nonexistent and by 2005 over 19,609 renal transplants were performed under the new system. This new system effectively eliminated the need for dialysis in Iran, and since the waiting list is nonexistent, that means that even the poorest of those who needed a kidney received it. The Iranian system used compensation effectively to increase its number of live donors. By contrast, as Iran was provided with more donors than they had patients who needed transplants, the US was broadening its

definition of a healthy organ (Ghods & Savaj, 2006). Friedman and Friedman (2006) have found that a common fault in the altruistic system is that because of the “shortage of donor kidneys, acceptance of what previously have been termed 'marginal' kidneys termed 'expanded criteria donors' from geriatric, hypertensive, and even proteinuric donors has increased progressively” (para. 3). Unlike the US, Iran was able to supply all of those who qualified for their kidney wait lists with healthy, live donated organs at a set price point.

The ethical concerns about an organ market can be justified by those who support a compensation-for-donation plan; Iran, for instance, found that many nonprofit organizations stepped up to help pay for the organs of those who could not afford them. One common opposition, the claim that such systems are unethical because they most likely take advantage of the society's less educated members, was also laid to rest, as researchers found that in Iran after “All of these donors and recipients were grouped according to their level of education; (they) showed no significant differences. In this study, 6.0% of living-unrelated donors were illiterate, 24.4% had elementary school education, 63.3% had a high school education, and 6.3% had university training” (Ghods & Savaj, 2006, para. 6). Though some of the population who donated was not very well educated, this number also corresponded to the education levels of those who received the organs, which seems to show that those with low education levels benefited from organ donation as much as they donated.

It is not possible to ignore that Iran differs vastly from the United States in both economic and social terms, but those who support compensation for organ donation have presented economic models applicable to the United States. One of these models was created by the 1992 Nobel Laureate in Economics, Gary S. Becker and his co-worker Julio J Elias; this model listed a fair market price of \$45,000 for live-donor kidneys. They came to their findings by “Assuming that an American earning a mean of \$40 000 annually has a life valued at \$3 million, faces a risk of death from nephrectomy of 1%, a decrease of 5% in quality of life, and will lose \$7000 of income due to convalescence from surgery” (as cited in Friedman & Friedman, 2006, para. 11), though the death rate they calculated is also significantly higher found by most studies, which is closer to three in 10,000 (Friedman & Friedman, 2006).

While waiting for a kidney transplant, patients typically go on dialysis to try and replicate the blood purifying qualities of the kidneys. Dialysis is not only a painful and temporary fix, but also an expensive one. According to the American Association of Kidney Patients, it costs about \$30,000 dollars per patient per year to perform dialysis, and the average wait period in America for a kidney is three to five years for those who do not have a friend or relative willing and able to donate (“The Waiting List”). This means that the total payment for dialysis for someone in need of a kidney who does not have a direct donor match in the family would be on average \$90,000 to \$150,000. For insurance companies, then,

a compensatory organ market makes especial sense, since the cost of dialysis – which is usually covered in full by the insurance company – is more expensive than the predicted fair market price for a kidney. Those who support a market for organs believe that it is an economically beneficial system, and that it is morally superior to the altruistic system. Quite simply, the current system allows for Americans to die every day while waiting for organs that could be procured through other motivations.

My personal opinion on whether the purchasing of organs should be allowed is a combination of ideas from altruistic systems and the free organ market system. The first step in an ideal system would be to follow Singapore's lead and change our deceased-donor organ system to an opt-out, rather than opt-in, route: this is because 55% of Americans are not registered as organ donors even though they support organ donation (Siegel, 2014). I doubt that the people represented by this percentage are waiting for more incentives; more likely, they are poorly informed or too lazy to go register. After a ten-year trial, I would re-evaluate how effectively the new system has worked following its implementation, and if it remained ineffective at reducing the need for uncompensated organ donations, I would then switch to a system in which surviving family members were compensated for the deceased's organs after death. If surviving family members were compensated around \$10,000 for a kidney, for example, that would represent about a fourth of Becker and Elias's

aforementioned market price: this decrease is due mostly to the fact that the quality of life after the surgery and the risk associated with the surgery is not applicable to a deceased donor. Furthermore, this monetary incentive could be enough to motivate the 55% of Americans who already believe in organ donation to register. However, I would avoid selling or compensating for organs from living donors, as this would leave the United States open to a potentially dangerous socioeconomic clash. Though results in Iran were promising, a free market organ system in the United States has greater potential to prey on poor and homeless populations, and less social leeway for such exploitation. In Iran, the potential for exploitation of the poor through incentivized organ harvesting was not a major problem within the country itself, considering their track record of human rights violations (“Iran”); the United States, however, also cannot take the risk that charitable organizations will not step up to help pay for the organs of the poor or uninsured.

Ultimately, I do think that American society could understand and accept the compensation for organs post-mortem, especially because deceased donors are not being harmed by the surgeries or exposing themselves to unnecessary risk for monetary gain. The system could work for the insurance companies, at least for kidney donations, if the price of the organ is less than stopgap measures such as dialysis. The insurance companies could use this saving to cover the costs of any transplant surgeries that are not cost beneficial. The healthcare system already

benefits the rich in many ways, so if the organ donation market has to benefit the rich slightly to help a greater amount of people, this seems like an acceptable tradeoff. For example, the current dialysis system is not of equal quality for all patients with kidney failure. Many patients who are on dialysis for significant amounts of time have major disruption to their days because of their daily scheduled transfusions. Many dialysis patients also feel that it is easier for them to puncture themselves with the needle, much like diabetics do not go to get insulin shots delivered by professionals. One popular option for upper-class Americans with this disease is a home dialysis system. To set up a home dialysis center, however, you not only need to own a home, but you also need to be able install certain waste pipes and electrical circuits that cost thousands of dollars out of pocket. The fact that you have to own a house and be able make these drastic changes to it eliminates a large percent of the working class because they can only afford to rent cheap housing (“Cost Associated With Home Dialysis”). If the number of organs available for transplant can match the number of needed recipients through the buying of organs donated post mortem, then there will be less of a problem among different classes with the same needs. Like Iran, if the United States can eliminate the donor list, then everyone has been given an equal chance at life without falling into what Pope John Paul II warned against when he said that “buying and selling organs violates the dignity of the human person” (Friedman, 2006, para. 6).

The National Organ Transplant Act of 1984 and the American altruistic donation system of today both need to be revised in order for patients to be able to receive the organs they need. Although there are effective arguments from those who both support and oppose organ markets, the effective solution may be somewhere in between, and should start by addressing the complacent attitude that a majority of the American population takes toward organ donation. This motivation could come from financial compensation, or from making the registration process easier or opt-out versus opt-in, but the important thing is that action is taken immediately because the dearth of transplantable organs is becoming a literally life-or-death situation.

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