Organs for Sale or Rent: Solutions to the Donor Shortage

From 1996-2000 I worked as a nursing assistant and unit coordinator for the kidney and liver transplant unit at Oregon Health and Sciences University. During this time period, I worked with several patients that had either just received an organ transplant, or were very ill and were awaiting a transplant. Out of the hundreds of patients that I worked with, one patient I worked with stands out.

Marge was in her mid-thirties and a divorced mother of three children. Marge was the sole source of support for her young children, and for many years worked two jobs to provide for them. Marge was diagnosed with hepatitis C which attacked her liver. Within months of being diagnosed, Marge was in end stage liver disease. Marge needed a liver transplant to survive. After careful screening and a battery of tests, she was placed on the waiting list to receive a liver transplant. After over nine months of waiting for a liver, Marge's disease had advanced to the point that she was no longer healthy enough to tolerate a transplant and was removed from the list. Later that year, Marge died as a result of end stage liver disease. Marge's situation placed a very human face on what American's are told everyday, there is a tremendous shortage of organs being donated for transplant.

Marge's situation mirrors the tens of thousands of people throughout the country awaiting an organ transplant. According to the United Network for Organ Sharing, the organization that oversees the regulation of organ donation and transplantation, as of May 22, 2005 there are 88,557 people in the United States currently on waiting lists for an organ transplant (UNOS n. pag.). The need is greatest for kidney and liver donations, as there are 61,940 people awaiting kidney transplants, and 17,367 people in need of liver transplants within the United States (UNOS n. pag.). While the scientific and ethical debates surrounding organ donation and transplantation are complicated, one fact remains clear: the current US policies surrounding organ donation needs to be radically overhauled to bring the supply of organs closer to the demand. Options that deserve a fair examination include allowing the sale of organs by living donors and converting to a presumed consent system of organ donation such as the ones found in several European countries.

Organ transplantation has a comparatively brief history in the United States. The first kidney transplant was performed in 1954 at Peter Bent Hospital in Boston, MA. The kidney was taken from one identical twin and transplanted into the remaining twin. Because the twins were identical, the treating physicians did not use any drugs the would suppress the immune system of the recipient, as they mistakenly thought that the twins shared the same immune system, and there would not be a distinguishable immune response leading to rejection of the organ (Stanford n. pag.). Many advances have been made in the last fifty years, culminating in just over 16,000 kidney transplants in 2004 (Organ n. pag.). For

the thousands of people not able to receive a kidney transplant, dialysis remains the only option.

There is a common misconception that dialysis acts as a substitute kidney for patients in end stage renal disease. "Dialysis is nothing more than using a machine to take over the kidney's filtration function" (Munson 113). While dialysis does keep patients alive, their quality of life is drastically altered. Dialysis patients usually undergo treatment at a clinic for 4-5 hour sessions three times per week.

> Despite the name 'artificial kidney', dialysis machines perform only the filtration function, and the regulatory hormones produced by normal kidneys aren't supplied. (Munson 113)

The lack of these regulatory hormones lead to problems such as "anemia, generalized infections, neurological damage, gastrointestinal bleeding, headaches, and bone disease" (Munson 114). The exhausting effects of dialysis also have a devastating effect on a patient's mental health.

> Depression is common. Five percent of dialysis patients take their own lives, and another 7 percent commit 'passive suicide' by dropping out of treatment programs or refusing to stick to their diets. Failing to adhere to the rigid requirements governing successful dialysis is the third most common cause of death among older patients. Dialysis is so hard to endure that only the prospect of certain death keeps most people tethered to the machines, and for some even that prospect becomes preferable to prolonged suffering. (Munson 114)

For many dialysis patients, the faint hope of a kidney transplant is the only incentive that ensures compliance with their treatment program.

Kidneys can be harvested either from a cadaver or can be donated from a living donor. This is because humans can live healthy and productive lives with only one kidney with relatively few side effects. The prevalence of living donors has increased drastically over the past few years. According to the Organ Procurement and Transplantation Network, in 2004 of the over 16,000 total kidney transplants, 6647 of those kidneys came from living donors (Organ n. pag). Although these types of donations are most common between blood relatives, transplant recipients can receive kidneys from living non-related donors as long as the matching and screening tests are successful. Success rates are actually higher for transplants from living donors as opposed to kidneys from cadavers (UNOS n. pag).

During my tenure at OHSU, I observed that the surgical procedure itself is actually more difficult for the donor. This is because the kidney is located deep in the lower abdominal cavity. To remove it, many layers of muscle and connective tissue must be cut through to harvest the organ. This leaves the donor with very high levels of pain that are controlled with post operative pain medication. Aside from the controllable pain levels, there are very few known complications as a result of kidney donation. The donor is typically released from the hospital within 3-4 days following surgery and can return to normal levels of activity within a couple of weeks. The surgical procedure is much easier for the recipient, as the recipient's failed kidneys are usually left in the patient, with the new kidney being

placed over the original. The challenges for the recipient arise after surgery and can result from complications from immunosuppresion, rejection, and post-operative infections.

While the medical advances in renal transplantation have been amazing, the current organ donation structure is not designed to meet demand. There are far too many restrictions regarding what criteria must be met for an organ to be accepted. According to the United Network for Organ Sharing, as of May 15, 2005 there are 61,888 on the waiting list to receive a kidney transplant (UNOS n. pag.).

Given that both kidney and liver donations can now be successfully made from living donors, one practical option to increase the number of transplants is to offer a financial incentive to living donors. Unfortunately, UNOS currently has an unwavering stance against paying donors, stating that,

> The purchase and sale of organs is specifically forbidden by the National Organ Transplant Act. The living donor's direct medical costs and expenses such as travel or lodging directly related to the donation may be reimbursed as an exception to the purchase/sale prohibition. (UNOS n. pag.)

Some medical ethicists are beginning to question the unilateral resistance to a paid donor program. In their article "The Ethics of Organ Transplantation Reconsidered: Paid Organ Donation and the Use of Executed Prisoners" Drs. J. Steward Cameron and Raymond Hoffenberg contend that the "resistance is based on an initial revulsion against both and not from reasoned ethical debate"

(Cameron 724). By not engaging in a reasoned debate on the advantages and disadvantages of paid donation, progress on increasing the number of organ donations is at a virtual standstill.

The financial incentive for living kidney donors needs to be large enough to entice donors from many different economic and ethnic backgrounds, but not be so large that it is cost prohibitive. The system also needs safeguards to prevent both the exploitation of poor donors and an unfair advantage to wealthy patients awaiting a transplant. To uphold these high standards, the paid organ donor program should be administered by the United Network for Organ Sharing, and funded by the federal government.

UNOS is a logical choice to oversee and administer the program, given that they are the body charged with administering the existing organ transplant program in the United States. UNOS is well versed in creating and upholding strict ethical standards, and can effectively enforce these standards to prevent systemic exploitation and manipulation. UNOS is also the existing body that matches up available harvested organs with candidates on the waiting list. "Bidding wars and open markets can be avoided by turning over buying and distributing kidneys to an organization like UNOS" (Munson 123). Creating a separate body to oversee that paid donation process will serve only as an additional layer of health care bureaucracy that will hinder the organ donation process and potentially exploit the paid donors.

To maintain a level playing field where both poor and wealthy patients needing transplants are given equal consideration, a universal ban on kidney

recipients directly paying donors must be maintained. The funding source for paid organ donations should be Medicare, not wealthy patients needing a transplant. The federally funded Medicare system is the current funding source for both the dialysis treatment and kidney transplantation. To make the program enticing to people from a variety of economic backgrounds, but not be cost prohibitive, the dollar amount should be roughly equivalent to the current cost of maintaining a patient on dialysis treatment over several years. In the article "Researchers Calculate Cost Savings of Living Kidney Donors" Nicole Vines details a research study by Drs. Mark Schnitzler and Arthur Matas.

> Schnitzler and Matas set up a mathematical model to determine whether it is economically feasible to pay donors. Their study shows that society could pay each donor $90,000 and easily break even. (Vines n. pag.)

The doctors established the number by completing a comparative analysis looking at the cost of treatment for dialysis versus the cost of treatment for a kidney transplant over twenty years. They found that for a

> living un-related donor kidney transplant, the estimated medical expense for 20 years following transplant is $277,600. The expected cost for a dialysis patient for that long is $372,179. (Vines n. pag.)

The implementation of this program will actually result in a cost savings to the government. According to Schnitzler and Matas' data, the annual cost of dialysis is approximately $18,000 (Vines n. pag.). Given that there are almost 62,000 people waiting for a kidney transplant, (UNOS n. pag.) the annual cost of dialysis for this group is over 1 billion dollars. By permitting payment to donors, the

number of kidney transplants would radically increase each year, resulting in a large reduction in the number of patients receiving dialysis each year. This reduction will lead to an enormous cost savings to tax payers and a surge in the quality of life for the tens of thousands of patients with end stage renal disease.

The most common argument against paid donation is that the poor would be exploited into donating their organs for profit.

> The General Medical Council in Great Britain stated that 'Where human organs are bought and sold, transplantation will be governed by money rather than by the medial interests of the donors and recipients, with the vulnerable and the poor inevitably exposed to exploitation'. (Price 409)

There are several problems with this particular line of reasoning. The transplantation and dialysis industries are already 'governed by money'. Pharmaceutical companies have very lucrative divisions devoted entirely to marketing their anti-rejection drugs to patients. Hospitals profit by luring transplant surgeons to their facility, and by publishing the research that these surgeons conduct. Surgeons, nurses, and other hospital staff all profit from the transplant process. Reforming the transplant system to permit paid donation will not transform the focus, it will only maintain the current structure.

The paid donor system must be properly administered in order to prevent exploitation from the healthcare system. Given that Medicare is the current funding source for both dialysis treatment as well as kidney transplantation, it is logical to maintain Medicare as the funding source for paid donations. Medicare

should be retained as the funding source, and UNOS should be retained as the administrator of the paid donor program.

UNOS has maintained a regulatory structure that has leveled the playing field for transplant recipients, regardless of their economic standing. They have long standing policies with numerous checks and balances in place to ensure compliance with their high ethical standards. These policies are coupled with strong governmental oversight as well as international oversight from international transplant organizations. UNOS can be trusted to maintain these high ethical standards under a paid donor system for both donors and recipients.

The Joint Commission on Accreditation of Healthcare Organizations is the oversight body that oversees the regulatory compliance the actual hospitals (Ulaskas 14). Writes Dr. David Price, a professor of medical law, "A system of regulation should be able to prevent the harmful effects to society and to recipients" (Price 411). The current system of multiple regulatory agencies overseeing virtually every aspect of transplantation in the United States will prevent the potential "harmful effects".

The contention that paid donation would exploit the poor is short sighted and does not address the circumstances leading people into poverty. Underachieving school systems in poor neighborhoods, lack of access to basic and preventative health care, lack of affordable health care, and the absence of affordable housing are the major issues that exploit the poor.

> It is the financial circumstances that make it necessary for someone to consider offering body parts for sale that defines exploitation of the individual. (Cameron 727)

Offering substantial compensation for organ donation will only empower the poor, not exploit them. By employing strict regulations and offering an incentive as large as $90,000 as suggested by Drs. Schnitzler and Matas, paid organ donation offers a chance to help poor donors break out of the cycle of poverty.

The $90,000 sum will also appeal to potential donors that are not living in poverty. It will attract people from many different socioeconomic backgrounds and levels. An incentive of this size will distinguish organ sales from selling plasma. The fees for selling plasma are nominal at best. A three hour time commitment usually only nets the donor approximately $25. Such shamefully low incentives to donors are what helps maintain plasma donation as a stigmatizing option for only the very poor.

Many plasma donors are repeating donors, and seem to be part of their own sub-culture. Given that humans must have at least one kidney to remain healthy, donors will only be able to donate once, as opposed to plasma donors that are permitted to sell their plasma as many times as they choose.

The United Network for Organ Sharing's strict health standards will ensure that people who choose to sell their kidneys must have a healthy lifestyle. Other then the mandated HIV testing standards, plasma donation standards have no such health standards.

Alice Cushman and Betty Burke are a perfect example of how paid organ donation can be a mutually beneficial transaction. Alice was an extremely wealthy woman whose daughter was in need of a kidney transplant. Betty was a single mother whose son had leukemia and needed a bone marrow transplant. Betty's insurance would only pay for a portion of her son's transplant, Medicaid would not cover him. Betty was required to pay $30,000 before the hospital would perform the transplant. Alice and Betty met in the hospital waiting room. Alice had the money to pay for Betty's son's transplant, and Betty's kidney was a match for Alice's daughter. They told the hospital social worker that Betty was a distant relative of Alice. Betty's son received his bone marrow transplant, and Alice's daughter received her kidney transplant (Munson 98-109).

Betty Burke was not exploited by Alice Cushman's request for her kidney; she was exploited by a health care system that would not take care of her son. The ability to sell her kidney gave her a chance to change the situation that prevented her son from receiving his transplant. Legalizing paid organ transplantation would open the door for many other people like Betty Burke.

Organ donors are the only members of the transplant process that do not receive any form of material benefit from the process. Recipients get a new organ, transplant surgeons receive an enormous fee, pharmaceutical companies profit from the anti-rejection drugs, and the hospitals also receive compensation. Donors are also the only members of the transplant process that are asked to make a sacrifice. Given that organ transplantation is a multi-billion dollar industry, it is more than fair to allow donors to collect their piece of the pie. Contrary to the

previous assertions by transplantation governing bodies, an argument can be made that the donors are being exploited by not being paid.

A subsequent argument in defense of allowing the sale of organs is to examine the role autonomy plays in American society. America is a country founded on people's desire for self rule.

> While society does restrict some actions, we recognize a prior presumption in favor of autonomy. We believe rational individuals should be permitted to be self-determining-that their actions should be the result of their choices and decisions. (Munson 119)

As a society, America trusts adults to make decisions for themselves that may cause harm. For example, adults are allowed to smoke, drink alcoholic beverages, and drive motorcycles. All of these behaviors are known to cause harm to the individual, and provide no societal benefit. Legalizing the sale of ones kidneys is a similarly risky behavior, but will provide an enormous societal benefit.

Opponents of paid donation also cite the lack of altruism that is involved in paid donation. The school of thought is that organ donation should be a purely altruistic event, motivated only by the donors desire to help the recipient. The line of reasoning in this argument parallels the exploitation of the poor contention. Both arguments ignore the fact that donors are the only members of the transplant team that are not supposed to receive any compensation for their contribution. In America, it is legal to compensate blood and plasma donors. This policy allows for an ample supply of blood products to be available when needed, and provides donors with a limited amount of extra money. Legalizing paid kidney donation

will have the same effect, the number of kidney transplants will radically increase, and donors will also receive a financial reward.

A subsequent solution to the organ donor shortage is to convert the United States to a policy known as presumed consent. Presumed consent would attempt to increase the number of cadaveric organs transplanted, as opposed to paid donation which focused on living donors. The U.S cadaveric organ donation system currently operates under a system of express consent (UNOS n. pag.). Under this system, the consent must be given for a deceased person's organs to be harvested. Even if the deceased had expressed a desire to donate his or her organs prior to death, the remaining family members must give permission for a hospital to harvest the viable organs.

In a presumed consent model, it is assumed that every person in that country will donate their organs upon death. In countries that have presumed consent legislation, each person has the option to opt-out of the program. This provides a safety net for people who's religious or spiritual beliefs do not permit them to donate their organs (Price 83-86).

The evolution of organ transplantation is trending towards presumed consent.

> Most of the early laws passed were of the express consent variety. That picture soon changed. In 1981... thirteen out of the twenty eight countries outside the US surveyed had some form of presumed consent regime... In 1987 twenty one Member States and Finland had presumed consent regimes in Europe at that time. (Price 86)

The research consensus illustrates that countries with a presumed consent model perform more transplants per million people than countries that have an express consent model.

> Belgium is frequently held up as an 'advert' for presumed consent, in terms of its success in increasing organ donation/ transplantation rates. Before the passing of the presumed consent law in 1986, there was substantial uncertainty as to the legal position governing organ procurement. Following its passing, the number of kidneys available for transplantation increased by 114 per cent between 1985 and 1989. (Price 89)

Singapore also experienced a strong spike in the number of donations after enacting presumed consent legislation (Price 93). Other countries with presumed consent systems include Austria, France, Luxembourg, Poland

Works Cited

Cameron, J. Stewart. Hoffenberg, Raymond. "The Ethics of Organ Transplantation Reconsidered". *Kidney International.* Feb. 99. Volume 55 Issue 2. p. 724-733.

Ghamarai, Z. Tolou. "The History of Renal and Liver Transplantation". *The Internet Jounal of Pharmacology".* 2003 Volume Number 1. p. 1-3.

Kidney Transplantation: Past, Present, and Future. www.stanford.edu/dept/hps/transplant. Date accessed: May 22, 2005.

Munson, Ronald. *Raising the Dead, Organ Transplants, Ethics, and Society.* Oxford University Press. 2002.

The Organ Procurement and Transplantation Network. www.optn.org. Date accessed: May 22, 2005.

Price, David. *Legal and Ethical Aspects of Organ Transplantation.* Cambridge University Press. 2000.

Ulaskas, Cherie. *Nursing Management.* "Coming Soon: Tissue Storage and Issuance Standards". April 2005. Volume 36 Issue 4. p 14-16.

United Network for Organ Sharing. www.unos.org. Date accessed: April 25, 2005.

Vines, Nicole. "Researches Calculate Cost Savings of Living Kidney Donors". http://mednews.wustl.edu. Date accessed: April 25, 2005.