Term paper for Health Economics, Econ 339

Kidney for Sale: Is the Idea Legal, Ethical, or Economically Sound?

Abstract: Each year thousands of people die while waiting for a kidney transplant. A market for kidney sales is currently illegal in nearly every country. This paper addresses the legal and ethical issues, as well as the economic effects that a legal market would create. The following aspects of such a market were explored: the ethical pros and cons; the current price ceiling for a legal kidney; the current supply and demand of donor kidneys; the fair market price; and the effect on supply and demand in a legalized market. The conclusion is that if paying a living donor can be made legal and as ethically acceptable as other medical practices, kidney sales would be economically sound.

Keywords: Market for Organs, Health Market Reform, Sales of Organs

1 Introduction

Should organ sales be legalized in the United States? In today's society, many people are suffering from diseases and conditions that require an organ transplant in order to survive. The transplant list for those in need of a new organ such as a kidney seems endless. Every day, nearly 74 people receive an organ transplant, while each day another 17 people die waiting for their transplant due to the lack of donated organs (Friedman & Friedman, 2006). Why is the demand so large? Why are there not enough? Should someone be able to sell his organ to a person in need? Is it legal, ethical or even economically sound to create a market for the sale of a kidney? What economic effects might there be if kidney sales were legalized?

In the past few decades, immunosuppressive therapy and improved organ transplant expertise have increased the survival rate of kidney transplant patients (Ghod & Shekoufeh, 2006). For end stage renal disease (ESRD), transplantation, not kidney dialysis, has become the preferred treatment, because it provides the patient with an improved survival rate and a better quality of life (Ghod & Shekoufeh, 2006). In turn, the number of patients with ESRD being treated by dialysis and waiting for transplantation continues to outstrip the donor pool of kidneys (Friedman & Friedman, 2006).

The donor pool consists primarily of deceased donors and some live donors. Statistics show that only about 30% of Americans register to donate their organs after death (Knapp, 2005). Over the past ten years, the number of deceased donor kidneys has not increased despite efforts by the National Kidney Foundation, State Drivers License promotions, and celebrity ad campaigns (Friedman & Friedman, 2006). In First World and middle-income countries, the demand for donor kidneys has increased. The populations of these countries live longer and typically develop ailments such as hypertension and diabetes caused by obesity

which contribute to kidney failure (The Economist, 2008). Fewer deaths from strokes, heart attacks and motor vehicle accidents have reduced the supply of cadaver donors (The Economist, 2008). Each year, the wait list grows longer. Figure 1 illustrates that the demand for kidney transplants has grown faster than the actual supply of kidneys. As of January 2007, there were nearly 95,000 people waiting for an organ transplant (Bramstedt, 2007). In a one year period, 7,000 people died waiting. Of those 7,000, approximately 4,000 were waiting for a kidney (Bramstedt, 2007). The United Network for Organ Sharing (UNOS) predicts that by 2010, there will be nearly 100,000 people who will have to wait an average of ten years for a renal transplant (Bramstedt, 2007). If this trend continues, the supply of kidneys will never come close to meeting the demand. Given this dilemma, it is necessary to at least consider other options to procuring the needed kidneys.

2 Legalizing Kidney Sales?

A controversial solution is to lift the ban on purchasing kidneys from live donors, or permitting some type of compensation to the families of cadaver donors (Castro, 2003). Currently, the National Organ Transplant Act of 1984 (NOTA) deems the sale of organs unlawful and those who are found guilty of this act could be fined or sentenced to prison (Mayes, 2003). This ban on kidney sales in effect makes the maximum legal price for a kidney \$0 (Cloutier, 2007). This is called a price ceiling. Figure 2 demonstrates that only 20,000 kidneys would be supplied through donation when the price is \$0. However, 80,000 are demanded. This leaves a shortage of 60,000 kidneys which is the difference between the quantity demanded and the quantity supplied when the price is \$0 (Cloutier, 2007).

Whether or not to reverse or amend this act has been a subject of great debate. There are numerous legal, ethical, and economic questions that are being argued by an array of experts.

2.1 The arguments against legalization

Opponents of kidney sales argue that this type of market would exploit the poor population (Erin & John, 2003). According to Nancy Scheper-Hughes, who is an anthropologist at the University of California, Berkeley, the demand for human organs would feed off the desperation of the poor who she believes would supply the majority of the organs (Hall, n.d.). Scheper-Hughes states, "The organs are going one way. They're going from poor people to rich people, from Third World to First World or to rich people in the Third World" (Hall, n.d.). Those who make this point believe it would be morally wrong for the wealthy to exploit the poverty of those who would supply the organs in a legalized market (Hall, n.d.). A study of paid kidney donors in India showed that selling a kidney initially bettered their economic situation, but did not lead to a lifetime of economic benefit (Goyal, 2002).

A second argument against legalizing kidney sales has been that the buying and selling of organs violates the dignity of the human person, and it treats the kidney like a commodity (Friedman & Friedman, 2006). Critics claim that the dignity of a human being is denied when his basic parts, such as kidneys, are sold even after he has died and no longer needs them (Castro, 2003). With respect to treating kidneys as a commodity, Scheper-Hughes who strongly objects to the legalization of kidney sales states, "It's a question of whether you want to turn the body into a factory of spare parts that becomes simply comodified" (Hall, n.d.). Although there are a variety of other opinions for not legalizing kidney sales, the two previously mentioned are the ones that are most frequently argued.

2.2 The arguments in favor of legalization

Setting aside the major criticisms, some arguments in favor of kidney sales can be discussed. First, people have the autonomy or right to self-govern and make their own decisions about what is moral or ethical (*Merriam-Webster Online Dictionary*, 2008). Supporters of this opinion feel that it is not only ethical to sell a kidney, but a right because it is their body and their life. In his article, "Biotechnology, Ethics and Free Markets," (2008) Julian Savulescu poses an interesting thought. He states, "But if you own anything, have a natural right to anything, it is surely your own body. Indeed the fact that we can give organs and parts of our body away implies that we own them. Giving implies ownership - if we can give, we can sell" (Salvulescu, 2008). People take all kinds of risks, including some for money. Some may choose risky jobs because they have determined that the money outweighs the risk (Erin & John, 2003). Others risk damaging their body for pleasure by participating in activities such as smoking or skydiving (Erin & John, 2003). Their activities would not be banned or judged. Friedman sums up the autonomy argument for permitting kidney sales. He states, "The case for legalizing kidney purchase hinges on the key premise that individuals are entitled to control of their own body parts even to the point of inducing risk of life" (Friedman & Friedman, 2006).

A second reason that supports the legalization of kidney sales is financial incentives would lead to more donations, which in turn would save more lives. Dr. Arthur Matas proposes a plan in which donors would be able to sell a kidney. The government would set a price and the expenses would be paid for by the recipient's health insurance, which would usually be Medicare (Perry, 2007). The sellers would be screened both medically and psychologically prior to the transplant. They would then be followed to determine the impact the sale had on their lives as well as their health (Perry, 2007). Mark J. Perry, a professor of economics and finance at

the University of Michigan, uses economics to show how a proposal such as Matas's could increase the number of organs available for transplant. He explained that whenever there are shortages, market pricing is absent. Market pricing will reduce or eliminate shortages. Therefore, market pricing for kidneys would eliminate or reduce the shortage and save thousands of lives every year (Perry, 2007). A fair market minimum price, much like a minimum wage for labor, would prevent the poor from being taken advantage of, and give buyers a chance at life (Savulescu, 2008). A fair market price of \$45,000 was suggested by the Nobel laureate (in economics) Becker (Savulescu, 2008). He based this fair market price on an average annual salary of \$40,000, which would be a lifetime income of 3 million (Savulescu, 2008). He calculated the risk of death at 1%, and a 5% decrease in the quality of life during the recovery period, which equaled \$7,000 (Savulescu, 2008). He adjusted the price of the fair market after calculating the true risk of death at about 1/300. This made the final fair market price \$20,000 (Savulescu, 2008).

Figure 3 illustrates what would happen if the ban on kidney sales was lifted (Cloutier, 2007). The graph indicates that at \$30,000, the amount of kidneys supplied would meet the number of kidneys demanded. Also, as the amount of money paid per kidney rises, the number of kidneys supplied would increase. Therefore, the equilibrium would be reached at \$30,000 thus eliminating the shortage (Cloutier, 2007). In short, payment for kidneys equals lives saved.

The third reason to permit the sale of kidneys is that it would be a financial benefit for an insurance company or Medicare (University of Maryland Medical Center, 2006). Researchers at the University of Maryland School of Medicine determined that a kidney transplant not only improved the quality of life for their patients, but it also saved money (University of Maryland Medical Center, 2006). They found that it was cheaper to have a transplant than to stay on

kidney dialysis for years until a donor match was found (University of Maryland Medical Center, 2006). In fact, the researchers discovered the break even point was 2.7 years, which saved the hospital about \$27,000 per year, per patient (University of Maryland Medical Center, 2006). Perhaps, even more significant was the finding that the use of living donor kidneys decreased costs because they functioned better than cadaver kidneys right after transplant (University of Maryland Medical Center, 2006).

3 Assessment

A review of both sides of this issue leads to the conclusion that selling a kidney should be legal and ethical, and it would be economically favorable because it would benefit thousands of people. The first opposing view was that a market for kidney sales would exploit the poor population. This argument is faulty because being poor does not make a person incapable of making a rational decision (Friedman & Friedman, 2006). They are certainly able to weigh the risks of this choice. According to Savulescu (2008), "If altruistic donation is safe enough, then commercial donation should be just as safe if it is legalized." Also, keeping the poor population from being donors prevents them from improving their financial situation (Friedman & Friedman, 2006). Finally, the gap between supply and demand for a kidney also concerns the poor because it creates a situation where someone could take advantage of them (Economist, 2008). If a legal market was regulated, there would be less possibility for black market activities because there would be no direct sales or purchases. Therefore, there would be no exploitation of the poor in other countries (Erin & John, 2003).

The second argument against legalizing kidney sales is that the buying and selling of organs violates the dignity of the human person, and it treats the kidney like a commodity (Friedman & Friedman, 2006). This position is also flawed. Savulescu (2008) states, "Where a

fair price is set, sellers are making judgments about how to promote their own well-being and other values. This is the expression of human dignity: to be autonomous." Treating the kidney as a commodity is no different than the sale of hair, eggs, blood or semen. Currently, the sale of these bodily materials is legal and ethically accepted despite the fact that they are sold by an unequally large portion of people who are poor (Castro, 2003).

4 Conclusion

If paying a living donor can be made legal and as ethically acceptable as other medical practices, kidney sales would be economically sound. Establishing a fair market price for a kidney would address concerns about equity and prevent exploitation by those in an illegal market (Savulescu, 2008). A fair market price would also likely entice more people to sell a kidney. This in turn would increase the supply, decrease the demand and eliminate the shortage.

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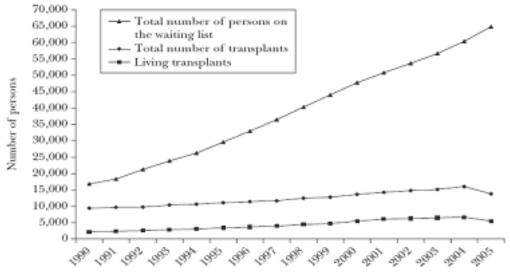
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Appendix

Figure 1
Kidney Transplants: Total Number of Transplants, Living Transplants, and Total
Number of Persons on the Waiting List in the United States: 1990–2005



Source: United Network for Organ Sharing.

Source: Becker and Elias,

Figure 1: Illustrates that the wait list rises at a faster rate than the total number of transplants. Source: (Cloutier, 2007).

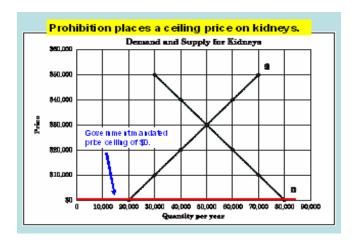


Figure 2a: A price ceiling of \$0 is established due to the ban on kidney sales. Source: (Cloutier, 2007).

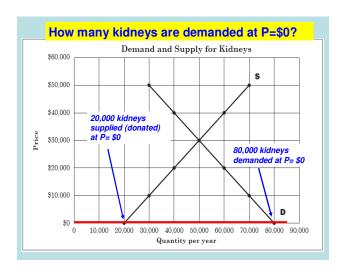


Figure 2b: How many kidneys are supplied and demanded when the legal price is \$0. Source: (Cloutier, 2007).

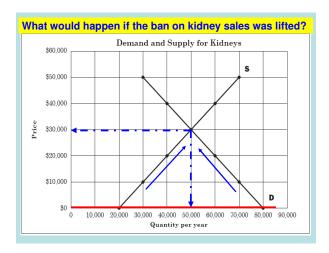


Figure 2c: Shows what would happen if the ban on kidney sales was lifted. Source: (Cloutier, 2007).