The Unjustified Policy Against a Market in Kidneys

CANSU CANCA*

Abstract

In this paper, I present two types of arguments against the prohibition as they apply to a regulated market in kidneys from living suppliers: (1) the utilitarian argument and (2) the argument from non-uniqueness. The utilitarian argument shows a regulated market is likely to result in a significant increase in overall well-being. The international guidelines and treaties supporting the prohibition invariably quote the harm associated with the illegal organ trade; yet, a regulated market does not share the characteristics of the illegal trade that gives rise to such harm. The argument from non-uniqueness, on the other hand, focuses on two objections against the market: objections from autonomy and justice. I argue that these objections, if taken seriously, apply equally to sale and donation of kidneys, the latter of which is unanimously endorsed in all international guidelines and treaties. Unable to identify any relevant unique aspect of a market, these objections fail to justify an exclusive prohibition of a market in kidneys.

Keywords: Regulated market in organ trading, autonomy, justice, utilitarian argument, argument from non-uniqueness

^{*} Lecturer in Medical Ethics, Medical Ethics and Humanities Unit, Li Ka Shing Faculty of Medicine, University of Hong Kong, 21 Sassoon Road, Pokfulam, Hong Kong SAR, China. (email: canca.cansu@gmail.com)

In 2015, the Council of Europe opened for signature its "Convention against Trafficking in Human Organs". The Convention defines organ trafficking to include any transaction "where, in exchange for the removal of organs, the living donor, or a third party, has been offered or has received a financial gain or comparable advantage" (Council of Europe 2014, Article 4b). With this definition, the Convention reinforces the prohibition of *all* commercial transactions involving human organs, a prohibition that is stated explicitly in a number of other international documents and in national laws of all countries with the exception of Iran (Council of Europe 1997, 2002; World Health Organization 2010).

Many arguments have been put forward for and against this prohibition. In this paper, I present two types of arguments against the prohibition as they apply to a regulated market in kidneys from living suppliers: (1) the utilitarian argument and (2) the argument from non-uniqueness. The utilitarian argument shows a regulated market is likely to result in a significant increase in overall well-being. The international guidelines and treaties supporting the prohibition invariably quote the harm associated with the illegal organ trade; yet, a regulated market does not share the characteristics of the illegal trade that gives rise to such harm. I argue that objections to such a market claiming that it would result in poor health outcomes, lead to crowding-out, and harm the global poor are unfounded. The argument from non-uniqueness, on the other hand, focuses on three objections to the market following the pattern of widely quoted principles of bioethics: objections from autonomy, "do no harm" (and beneficence), and justice. I argue that these objections, if taken seriously, apply equally to the sale and donation of kidneys, the latter of which is unanimously endorsed in all international guidelines and treaties. Unable to identify any relevant unique aspect of a market, these objections fail to justify an exclusive prohibition of a market in kidneys.

The following analysis assumes that the market in kidneys is subject to the same conditions, regulations and allocation methods as the system of kidney donation in developed countries, which ensures adequate healthcare and safeguards for suppliers' and recipients' informed, voluntary and rational participation.¹ This assumption allows the discussion to focus on the alleged immorality of commercialisation, holding other factors constant.

1. The Utilitarian Argument

In the United States, there are currently 100,419 patients waiting for a kidney, with a median waiting time of 3.6 years (OPTN 2016; USRDS 2015, Chapter 7).² In 2015 alone, 8,629 patients were removed from the U.S. waiting list because they died or became too sick to survive the procedure (OPTN

2016). The situation is not any better in other parts of the world (Council of Europe and United Nations 2009). No existing policy (such as increasing donations or decreasing risk factors for end-stage renal disease) alone or combined is able to make enough kidneys available to save these lives (Hippen and Matas 2009; Sheehy et al. 2003). A market system, on the other hand, is predicted to reduce, if not eliminate, the shortage of available kidneys (Becker and Elias 2007; Rosen, Vining and Weimer 2011; Scott and Block 2011).

Kidney transplantation is not a last resort; it is the best available treatment for end-stage renal disease. The five-year adjusted survival rate of transplant patients is 87% and 75% after receiving living and deceased donor transplants respectively; in contrast, it is about 45% for dialysis patients (USRDS 2015, Chapter 6).³ Transplant patients who never started dialysis live about 10–15 years longer than patients who stayed on dialysis; and the longer they stay on dialysis the less successful are their transplants, if they ever happen (Beth Israel Deaconess Medical Center n.d.; Council of Europe and United Nations 2009, 21; Meier-Kriesche and Kaplan 2002). Moreover, as the World Health Organization states, a kidney transplant involves "negligible" risks for the donor in a functional healthcare system: within 90 days after the donation procedure, the mortality rate of living kidney donors is 0.03%, and in the long run, there is no significant increase in the mortality or morbidity rate (Segev et al. 2010).⁴

1.1 Objection from Poor Health Outcome

A regulated market in kidneys should produce similar health results for both recipients and suppliers given that the participants would be subject to the same standard of care as in the system of donation. In contrast, the illegal organ trade abandons this standard of care and often gives rise to terrible and permanent health problems for both parties (Council of Europe and United Nations 2009; Gill et al. 2008; Scheper-Hughs 2002).

While the standard of care is the principal factor in determining health outcomes, one might argue that other factors, such as the socio-economic conditions of a typical kidney supplier, might have an adverse effect on the health outcome of both suppliers and recipients. The argument is that the suppliers typically do not have the means to take care of their health after the operation, which results in poor health outcome for themselves (Hippen 2008). Also, due to their financial motivation, they might not disclose information that makes them unfit for the procedure, which then results in poor health outcome for the recipients (Titmuss 1997).

The argument suggesting that the health outcome for suppliers would be worse than for donors even in a regulated market mainly rests on data from Iran (Fallahzadeh et al. 2013; Khatami et al. 2015; Koplin 2014; Zargooshi 2001). The Iranian data, however, only reports raw outcomes without controlling for the socio-economic background and suppliers' pre-operative health status. Thus, the data fails to show that the suppliers' health problems are due to the operation. Moreover, these results are subject to the specific character of the Iranian system where suppliers lack the understanding of the procedure and its risks, the financial means to attend follow-up visits, and an adequate health insurance (Fallahzadeh et al. 2013; Khatami et al. 2015; Zargooshi 2001).

When it comes to the argument concerning the health outcome for the recipient, we must take into account the patient's other realistic options: both dialysis and transplant from cadaver donations have significantly lower patient survival rates than transplants from living donors, as I already quoted above (OPTN 2016). These options also put the problem of non-disclosure into perspective. Deceased donors, whose kidneys are used in more than half of all annual kidney transplants in the U.S. (OPTN 2016), are unable to disclose any information regarding their suitability as donors. Doctors rely on medical tests to fill in this information gap. Under a commercial system, in contrast, living suppliers can disclose relevant information. Furthermore, since transplantation from a living supplier has less time pressure than one from a deceased donor, information gained through medical tests is expected to be even more accurate.⁵

In order to work in a utilitarian framework, the objection from poor health outcome has to make three assertions: (1) There is significant risk for poor health outcome for the suppliers and recipients in a market; (2) this risk outweighs the market's potential benefits; and (3) this risk cannot be reduced or eliminated by regulations. As I argued above, such risk is not empirically justified. Moreover, even if there were some increase in poor health outcomes in a market system, benefits of the market—that is, providing life-saving kidneys for thousands of patients—is still expected to outweigh this risk. And finally, those who put forth this objection also have to show that regulations cannot prevent systematic poor health outcomes in the market system. There is neither such evidence nor a strong argument to that effect.

1.2 Objection from Crowding-Out

The simplistic view of a market's role in making more kidneys available for transplant assumes that in addition to the existing and potential donors, a market would attract new suppliers. The objection from crowding-out challenges this claim and argues that a commercial system would fail to increase the number of available kidneys. According to this objection, while financially motivated new suppliers would provide their kidneys, potential donors would now withhold their donations. This could be because they prefer not to donate unless they absolutely need to or because they are repelled by the change from an altruistic system to an incentive-driven one (Rothman and Rothman 2006; Titmuss 1997). This objection rests on a number of studies that show that incentives crowd out altruistic participation in various areas of life (Frey and Jegen 2001). However, the consistency and strength of this effect is challenged. Most notably, a study on blood donors showed that a simple design enhancement —that is, in addition to payment, having the option to donate this money to a charity—fully counteracts the crowding-out effect for altruistic donors (Mellstrom and Johannesson 2008). But the question remains: How would the crowding-out effect play out with kidney transplants?

Crowding-out is a problem for the pro-market utilitarian argument if and only if the market indeed decreases or fails to increase the number of available kidneys for transplant. But would it? If the market fails to eliminate the shortage of kidneys, then some patients would remain desperate for donated organs despite the commercial option. We can divide living donors into two groups: directed donors and non-directed (that is, purely altruistic) donors.⁶ When a patient with a potential directed donor fails to acquire a kidney from the market, then the potential donor is again the sole life-saving option. Thus, even when a commercial system exists, the potential directed donor would have the same motivation to act-that is, to save a loved one's life-as they have in the existing donation system. When it comes to patients with no directed donors, the only option is non-directed donations. In 2015, non-directed living donation accounted for about 1.16% of all kidney transplants in the U.S. (OPTN 2016). This number is already so low that an adequate market system is expected to replace and surpass the potential loss in these altruistic living donations (Becker and Elias 2007). In line with this analysis, the evidence does not suggest that financial offers would lead to a crowding-out effect in living or deceased donations. A recent study found that individuals' willingness to become living donors is not negatively affected by a financial offer (Gordon et al. 2015). Similarly, another study focusing on deceased donations concluded that incentives had no negative effect on registered donors' decision to donate (Bryce et al. 2005).

1.3 Objection from Global Harm

The last utilitarian objection I consider here focuses on the global effect of a legal market in kidneys. The objection allows that a well-regulated market in

kidneys might be ethically justified in some countries. Yet it suggests that allowing a market even in these countries would have globally detrimental consequences (Danovitch and Delmonico 2008). Concretely, this global harm could occur because a legal market (1) enables the continuation or further growth of an illegal global black market and/or (2) gives way to the development of some forms of legal transplant tourism that is detrimental for vulnerable groups.

The first claim suggests a consequential link between legalising a market in some countries and a decline in the effectiveness of the global fight against the illegal organ trade. It is implausible to suggest that such an effect can happen simply because a legal market in organs shifts the rhetoric of organ sale from an absolute evil to a morally permissible system if well-regulated.⁷ A more plausible interpretation of this consequential link is that once a market in kidneys is legalised in certain countries (let us call these "home countries"), there will be a surge of human trafficking and illegal organ trading directed into this market as supply in the form of individuals travelling—or being smuggled—into the home countries to sell their organs. The question is, would this be a probable and inevitable result of legalisation of a market?

This claim assumes that when a legal market is established, both the market regulations and the regulations against human trafficking would be systematically and increasingly violated leading to a significant rise in the illegal organ trade. However, the justification to support this assumption of gross regulatory failure is simply lacking. Moreover, patients currently have the strongest incentive—life or death—to engage in transplant tourism, where they travel abroad to buy an organ from the black market. This existing practice feeds into illegal organ trade further harming vulnerable suppliers. Once a legal market is established and more kidneys become available for transplantation at home countries, significantly reducing or eliminating the waiting list, this incentive for participating in the black market would diminish, if not vanish.⁸ In other words, a legal market might in fact decrease rather than increase the demand in illegal organ trade.

The second claim, on the other hand, draws attention to the harm that could arise within the legal framework. The existence of a market in kidneys in developed countries could transform poor nations or local poor residents into legal "organ suppliers". This could, the argument goes, lead to the legalisation of some new forms of transplant tourism, such as foreign poor suppliers or rich patients legally travelling to home countries to participate in the market in kidneys, further harming the global and local vulnerable populations.

This argument points to the real issue of how to develop further regulations for a market in organs in a global context, but the grim picture it draws is unfounded. In the utilitarian framework, a market is unlikely to be morally

permissible if it fails to provide good health outcomes for the suppliers. Ensuring good health outcomes requires adequate follow-up care, which lasts for a minimum of two years (Reese et al. 2009; UNOS 2016). It is unlikely (in terms of practicality and cost-effectiveness) that poor foreign suppliers could be provided with such care, and if this is the case, an ethical and regulated market should exclude these suppliers. Similarly, the permissibility of allowing rich foreign buyers to take part in the market depends on various factors. On the one hand, if legally permitted, rich foreign buyers might make considerable financial contribution to the healthcare system benefitting the local population. On the other hand, allowing the global rich to participate in the national market might also result in them dominating the market and pushing the local poor population out of the waiting list. This might be objectionable not only for justice concerns, which can translate into negative utility by causing public distrust and disagreement with the system, but also for cost-effectiveness reasons. If the local poor population is unable to receive kidney transplants, the national healthcare system has to bear the burden of dialysis for this population, which is extremely costly.9 Permissibility of both of these forms of transplant tourism is subject to the results of the complex calculation of their respective utility. Fortunately, neither of these forms of transplant tourism is an inevitable consequence of legalising an organ market. If it is concluded that the harm caused by these forms of transplant tourism outweighs their benefits, various regulatory measures can and ought to be put in place to prevent foreign suppliers or buyers from participating in the market (Cohen 2013).

Those concerned with the organ market's effects on the poor have another related argument. They argue that if the global or local poor become or are simply perceived as the chief suppliers for an organ market, then there would be an incentive to keep these disadvantaged groups in their financially desperate circumstances. Regulations that would protect vulnerable groups and policies that would otherwise aim to alleviate poverty would now be absent in order to keep the market going (Zutlevics 2001). This argument, however, grossly simplifies the complex relationship between poverty and prosperity both within a society and across countries. Chronic kidney disease is rampant among disadvantaged populations due to their socio-economic circumstances, which leave them with inadequate nutrition, care and sanitation (Garcia-Garcia and Jha 2014; Hossain et al. 2009). Keeping this population in poverty as they develop kidney disease and require dialysis would create a significant burden on national healthcare. And even if most of this population were to fall outside of health coverage and therefore not add cost to the national healthcare system, they would still be unfit to become kidney suppliers. Furthermore, globally, developed

countries are far from immune to the issues that start off in and take hold of the developing world. Infectious diseases (such as Zika or Ebola) that thrive in poor regions become global health threats; political instabilities that feed on poverty come to threaten better-off societies. Suggesting that an organ market could single-handedly set off this extremely complex network of interactions would require a robust justification, which these arguments do not offer.

The utilitarian analysis of a regulated market in kidneys necessarily relies on predictions rather than actual evidence, because apart from Iran, there is no regulated kidney market. Unfortunately, the Iranian data, as already mentioned, is not representative. The lack of comprehensive data collection significantly weakens empirical results (Fallahzadeh et al. 2013; Khatami et al. 2015). Furthermore, Iran has a unique system, which presents issues that are not inherent to the market.¹⁰ However, if we must appeal to Iranian experience due to lack of any other empirical evidence, results would support a utilitarian pro-market argument: Iranian data suggests a rapid and significant increase in the overall number of kidneys despite some loss in potential directed donors and a steady increase in cadaver donations alongside the market (Ghods and Savaj 2006). Moreover, Iranian experience also suggests that there is no significant adverse effect of transplants from sales on the recipients' health in comparison to transplants from donations (Ghods and Savaj 2006) and by far, the majority of suppliers are satisfied by their decisions after the procedure (Mahdavi-Mazdeh 2012). Finally, by prohibiting foreigners from selling or buying a kidney in the country, Iran claims to have prevented the global poor from becoming its organ source and the global rich from dominating the market at the expense of its own citizens. In fact, studies suggest that more than half of kidneys transplanted from paid suppliers in Iran go to local recipients who live in poverty (Ghods and Savaj 2006; Mahdavi-Mazdeh 2012).

Studies estimate that a market system could significantly reduce and even eliminate the shortage of kidneys, saving thousands of lives without introducing any more risk or harm to the participants than there already is in the existing transplant system (Becker and Elias 2007; Rosen, Vining and Weimer 2011; Scott and Block 2011). The above analysis shows that objections challenging this conclusion fail to make a strong case. Furthermore, a larger pool of available kidneys would also result in additional benefits. An increased number and variety of available kidneys can lead to better matches as well as a shorter (or even non-existent) waiting period on dialysis, both of which increase the patient and graft survival rates while decreasing the rates of repeated transplants (USRDS 2015). In addition, non-directed kidneys are crucial to start kidney exchange chains, which amplify the effect of each non-directed supply.¹¹ While I focus on the health-related consequences of the market, it must also be noticed that the voluntary and informed supplier in the market judges that selling her kidney and receiving the financial benefits is preferable and desirable for her. To be sure, suppliers might be systematically mistaken about their preferences and what promotes their happiness and well-being. However, this empirical suggestion needs evidence to show that the suppliers are indeed significantly worse than an average individual in predicting their happiness and well-being and therefore, are in special need of paternalistic interference with their decisions even in a system where their rational, voluntary and informed decision-making is ensured. In the absence of such evidence, however, suppliers' decision to sell their kidneys shows that the transaction is their preferred option and likely to contribute to their overall well-being. From a utilitarian perspective, the calculation results in the increase of overall utility understood as well-being, happiness or preference-satisfaction in the society.

2. Argument from Non-Uniqueness

In the absence of strong justification for the alleged overall harm of commercialisation, advocates of prohibition make a bolder claim: Buying and selling organs is inherently wrong. Given that all international documents and national laws that prohibit commercial transactions of organs also support organ donation, this implies that buying and selling organs is inherently wrong in ways that donation is not. What, then, is unique about commercialisation that justifies this exclusive prohibition?

In this section, I focus on three arguments for the inherent immorality of commercialisation: objections to a market in kidneys from (1) autonomy, (2) "do no harm" (and beneficence), and (3) justice. These objections also follow the structure of the widely known and quoted principles of bioethics (Beauchamp and Childress 2012). Given the scope of this paper, I will not go into any conceptual analyses. Rather, I show that arguments relying on these concepts fail to discriminate between donation and commercialisation, and thus fail to support an exclusive prohibition of the latter.

2.1 Objection from Autonomy

The objection from autonomy suggests that the typical supplier does not make an "autonomous" choice because her economic desperation "coerces" her to sell her kidney. It is not an autonomous choice; it is the only option to preserve her welfare. Therefore, the objection goes, a market is inherently immoral because it necessarily causes a violation of suppliers' autonomy (Hughes 2009; Kerstein 2009). This objection is extensively analysed in the literature.¹² Putting the conceptual analysis of autonomy and coercion aside, the question I focus on is as follows: Does the market cause a violation of autonomy in a way that the donation system does not?

A typical supplier indeed sells her kidney for purely or partially financial reasons because of her economically constraining circumstances (Mahdavi-Mazdeh 2012). But what about a typical donor? 96% of living kidney donors are directed donors (OPTN 2016). This suggests that the typical donor makes this decision not under everyday circumstances but only when faced with the emotional distress and desperation of being the one—and perhaps, the only one—who can save a loved one's life. In some circumstances, this emotional distress is created or exacerbated by the shame, guilt and even isolation that the family would impose on a potential donor if she refuses to donate (Moazam 2006; Muthusethupathi et al. 1998).

One could argue that there is a morally relevant difference between the financial desperation of the supplier and the emotional desperation of the donor. This distinction cannot lie in the act's motivation. Both the donor and the supplier are typically motivated to save or improve the quality of their loved ones' lives. Rather, a relevant distinction between the donor's and the supplier's desperation could be made with regards to the causes of their autonomy-constraining circumstances. One could argue that the supplier's decision is a foreseeable result of government policies, which leave her in such poverty that her only welfare-preserving option is to sell her kidney (Kerstein 2009). This arguably puts policy-makers—perhaps even voters—into the position of the "coercing" agent. How does this argument play out in the current system of donation accompanied by the prohibition of commercialisation?

Decades of data show that policies aimed at increasing the number of available kidneys, such as promoting donation, implementing an opt-out system, and removing disincentives, fail to overcome the severe shortage in kidneys (Hippen and Matas 2009; Sheehy et al. 2003). Therefore, by prohibiting the kidney market, policy-makers foreseeably put the donor in a position where she has no other welfare-preserving option when faced with the death of a loved one. In this sense, one could argue that coercion and violation of autonomy occur as strongly in the system of donation as it would in the system of commercial transaction.¹³

2.2 Objection from "Do No Harm"

Harm and benefit are two sides of a coin. For that reason, the objection from the principle of "do no harm" is not just based on avoidance of causing harm

(i.e., principle of nonmaleficence) but also on providing benefits (i.e., principle of beneficence). To put it simply, the objection from "do no harm" asserts that the typical supplier in a market in kidneys is harmed by the surgery to provide her kidney. In many procedures (like most surgeries), the harm and risk is justified by subsequent medical benefits. However, the kidney supplier neither has a medical problem to overcome nor stands to gain any medical benefits from the procedure. Therefore, the objection goes, doctors have a moral duty not to be involved in procurement of organs from paid suppliers.

As one can immediately see, this objection works in all types of organ transplantations. Just like a financially motivated supplier, a donor also bears the harm and risks of the associated surgery without receiving any medical benefits. One cannot defend donation by an interpersonal harm-benefit evaluation arguing that the benefit gained by the recipient justifies the harm endured by the donor. Such an argument would apply equally to organ sale.

One could, however, argue that the difference between donation and sale can be found not in the physical but psychological well-being of the donor and the supplier. Banning one from donating her kidney to her sister, for example, is condemning her to watch her sister suffer and die, which might result in psychological harm for the would-be donor. In other words, it is plausible to assume that while the organ transplantation harms donors physically, it benefits them psychologically (Ross 2002). In contrast, the argument suggests, a financially motivated supplier receives neither physical nor psychological benefits from providing her organ (Caplan 2004; Rothman and Rothman 2006). However, this distinction crumbles quickly as we take a closer look.

The above argument has two problems: (1) It overestimates the enthusiasm of donors, and (2) it underestimates the role that financial means play in one's overall physical and psychological well-being. While a number of directed donors might in fact be enthusiastic about donating their kidneys to their loved ones, there are also those who decide to donate simply because they feel morally and socially obligated to do so. This obligation arises only with the existence of the option to donate. In other words, these individuals (including but not limited to the weaker members in some societies, such as women) would be better off if they were never given the option of donation. Moreover, this assumption that donation allows the donor to avoid psychological harm only applies to directed donors, excluding all non-directed altruistic donations. At the same time, many—if not most—suppliers in a market do in fact stand to gain psychological benefits. Often, these suppliers are motivated to sell their kidney in order to acquire the necessary means to help themselves or a loved one in crucial times (such as paying for a surgical procedure or education of their children). Prohibiting them from selling their kidneys also condemns them to suffering because they do not have the financial means to avoid harm. The argument suggesting that a financially motivated supplier receives no psychological benefits mistakenly ignores the helplessness that results from difficult financial circumstances and the psychological damage that this causes. Therefore, if psychological benefits can justify putting one through physical harm and risks, organ sale is as justified as organ donation.

2.3 Objection from Justice

The objection from justice focuses on the procurement and allocation of kidneys in a market. It claims that in a market, vulnerable populations would suffer from an unjust and disproportionate burden while the benefits go to wealthier groups. The typical supplier is poor, uneducated and possibly from a racial minority, whereas the typical recipient is socio-economically better-off (Scheper-Hughes 2002). This, however, is not an accurate portrayal of the dynamics.

Dialysis is a very costly treatment. In contrast, kidney transplants are known to be far more cost-effective (Council of Europe and United Nations 2009, 21; USRD 2015). In fact, data suggests that health coverage systems paying for dialysis could provide kidney transplants without any extra cost, even when factoring in the price of the kidney (Matas and Schnitzler 2003). In other words, unlike a free market or an illegal trade where the highest bidders would get the organs, a regulated market could provide kidney transplants to all patients regardless of their financial means, as long as their dialysis is already covered. Furthermore, as racial minorities contribute to the pool of kidneys, the market would provide better matches and thus longer patient and graft survival for patients from these racial minorities (USDHHS n.d.). Finally, data suggests that chronic and end-stage renal disease disproportionately affects lower socio-economic groups (Garcia-Garcia and Jha 2014; Hossain et al. 2009). Consequently, these groups stand to benefit from an effective system for kidney transplantation. In other words, the vulnerable groups would not just carry the burden of the system-they would also significantly benefit from it.

One might argue that the worst-off groups in most societies do not have health coverage and therefore cannot benefit from the market. In fact, if the market adversely affects the donations, then it is argued that these individuals will now lose all their chances for a transplant. However, the same problem persists in the system of donation, since such individuals cannot afford the procedure even if they are given a free kidney. The real issue here is not organ sale but healthcare allocation.

In contrast, the current system of donation-together with the prohibition of commercialisation—is rarely criticised for its injustices. In the current system where kidneys are scarce, directed donation is the best option with the shortest waiting time, leading to the least health deterioration and the best health outcome after transplantation. This privileges patients with large and healthy families or a large group of social relationships. Less fortunate patients (such as immigrants, orphans, widows, or those from a lower socio-economic background with unhealthy family members) have drastically lower chances of finding a donor and hence of survival. In fact, the current system's burden on patients with end-stage renal disease is not even contained in the existing long waiting list. As the United Nations and the Council of Europe study (2009) states, "[t]he most serious consequence of the shortage of organs to meet the demand for transplantation is the fact that many patients will never be placed on the waiting list." The injustices of the current system are also not limited to the patients; indeed, less powerful members of society and families, such as women in some societies, are actually most likely to be donors and least likely to receive donations (Moazam 2006, 108; Muthusethupathi et al. 1998). The donation system as it is already disproportionately burdens the most vulnerable groups by condemning them to dialysis, deterioration and death.

3. Conclusion

Opponents of commercialisation argue that a market in kidneys increases harm and/or is inherently immoral. They endorse and promote donations instead. Unfortunately, their arguments most often, if not always, fail to discriminate between the systems of commercialisation and donation. The fear of commercialisation has its roots in the illegal organ trade. While the illegal organ trade is documented to cause harm, there is no compelling reason to fear the same in a regulated market in kidneys. There is no empirical evidence to suggest such harm, given that there is no regulated market in existence, apart from the one in Iran, and Iranian data, if anything, supports the utilitarian argument for a regulated market. To be sure, studies cannot provide conclusive evidence that a regulated market will in fact behave as predicted and reduce harm by making significantly more kidneys available for transplant. But there is sufficient evidence showing that the existing system is unable to prevent harm. As it stands, this system with its prohibition on commercialisation allows for thousands of avoidable deaths each year and many more lives lived in pain, deterioration and dependence on machines.

Notes

- 1. I also assume that this regulated market would be a form of oligopsony or even monopsony where the government or centralised agencies act as buyers and distributers of kidneys according to the existing waiting list system.
- 2. That is, "by 3.6 years after being wait-listed for a transplant, 50% of patients had received a transplant" (USRDS 2015). Throughout this paper, I draw on data from the United States because it is the most accurate, detailed and up-to-date data available.
- 3. In addition, "[d]ialysis patients younger than 80 years old are expected to live less than one-third as long as their counterparts without ESRD ... Transplant patients fare considerably better, with expected remaining lifetimes for people under the age of 75 estimated at 67% to 84% of expected lifetimes in the general population" (USRDS 2015, Chapter 6).
- 4. To put this risk into perspective, it is the same as the three-month's fatality risk of logging or fishing, according to 2012 data of the U.S. Bureau of Labor Statistics.
- 5. In the case of unknown and thus untestable diseases, a necessary association of altruistic motivation with better health outcomes for recipients is shown to be inaccurate. Most notably, during the AIDS epidemic of the 1980s, homosexual men donating blood contributed to terrible health outcomes for the recipients of voluntary donation by unknowingly and involuntarily spreading the disease. See Healy 1999.
- 6. The term "altruistic donation" is often used only to refer to non-directed donation. Here, I follow this usage of the term. The U.S. Organ Procurement and Transplantation Network employs the term with this narrow scope that excludes directed donations (OPTN n.d.). On the other hand, the U.K. Human Tissue Authority uses the term with a slightly wider scope including both non-directed donations and a specific kind of directed donations where "there is no evidence of a qualifying genetic relationship or evidence of a pre-existing emotional relationship between the donor and recipient" (HTA n.d.). See Moorlock et al. (2014) for further discussion of the term and its use in organ transplantation policy.
- 7. Legalisation of a market in organs in some countries does not entail the loss of the consensus against the illegal organ trade. For instance, despite some countries legalising and regulating the sale of certain drugs, the UN and countries around the world continue the war against illegal trade in drugs. Similarly, allowing autonomous participants to sell their kidneys in a regulated market is in no way an endorsement of human trafficking for organ trade—just like the moral and legal impermissibility and outrageousness of forced labour is not questioned simply because labour itself is a legal and permitted part of social life.
- It is certainly possible that some patients may opt for faster or cheaper transplants abroad, accepting the risks associated with a lack of regulations and potential oversight. This, however, would make a much weaker incentive than having no other option but to wait for death and deterioration in a donation-only system, as is currently the case.
 I discuss this point in more detail below in section 2.3 on justice.
- 10. The Iranian system is regulated by the government, so the government buys and distributes the kidneys. There are, however, peculiarities to this system. For example, while the government reimburses all donors and suppliers, the extra payments that the suppliers receive come directly from the recipients through face-to-face negotiations

(Fallahzadeh et al. 2013). These negotiations, while arranged and supervised by an NGO, leave room for manipulations and false promises. Not to mention that this system also favours recipients with higher purchasing power. Such a system is in sharp contrast with a distributive arrangement that is modelled after the current deceased donation system, where organs are collected from suppliers for a set price by the government or centralised agencies and given to "unnamed strangers" in accordance with the waiting list.

- 11. The longest chain to date involved 51 donor-patient pairs within the U.S. (UAB Medicine 2015). A non-directed donor is required to initiate a chain transplant.
- 12. Among others, one of the best and most detailed refutations of the objection from autonomy is provided by J.S. Taylor in his book *Stakes and Kidneys* (2005).
- 13. This is not to say that *all* directed donors are coerced to donate. There might be those who, in fact, desire and prefer to be the ones who save the life of a loved one. Similarly, the assumption is not that *all* suppliers in a market system are coerced. Some may prefer to earn this sum of money by providing their kidneys and thereby saving the life of a stranger in the process. For such donors and suppliers, the coercion argument does not apply. However, it is plausible to assume that if a typical supplier is given the money that she needs without having to sell her kidney, she would not go ahead with the operation. Similarly, if a typical donor is told that an artificial kidney could be constructed to save her loved one's life with equal success, then she would prefer this over donating her own kidney.

References

- Beauchamp, T.L. and J.F. Childress. 2012. *Principles of Biomedical Ethics*. 7th ed. New York: Oxford University Press.
- Becker, G.S. and J.J. Elias. 2007. "Introducing Incentives in the Market for Live and Cadaveric Organ Donations". *Journal of Economic Perspectives* 21 (3): 3–24.
- Beth Israel Deaconess Medical Center. n.d. "Benefits of Transplant versus Dialysis". Available from: http://www.bidmc.org/Centers-and-Departments/Departments/Transplant-Institute/ Kidney/The-Benefits-of-Transplant-versus-Dialysis.aspx.
- Bryce, C.L., L.A. Siminoff, P.A. Ubel, H. Nathan, A. Caplan and R.M. Arnold. 2005. "Do Incentives Matter? Providing Benefits to Families of Organ Donors". *American Journal* of Transplantation 5: 2999–3008.
- Caplan, A.L. 2004. "Transplantation at Any Price?" *American Journal of Transplantation* 4 (12): 1933-4.
- Cohen, I.G. 2013. "Transplant Tourism: The Ethics and Regulation of International Markets for Organs". *Journal of Law, Medicine & Ethics* 41: 269-85.
- Council of Europe. 1997. "Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine". Available from: http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/164.
- ——. 2002. "Additional Protocol to the Convention on Human Rights and Biomedicine concerning Transplantation of Organs and Tissues of Human Origin". Available from: http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/186.

——. 2014. "Convention against Trafficking in Human Organs". Available from: http://www.coe.int/en/web/conventions/full-list/-/conventions/treaty/216.

- Council of Europe and United Nations. 2009, "Trafficking in Organs, Tissues and Cells and Trafficking in Human Beings for the Purpose of the Removal of Organs". Available from: https://www.coe.int/t/dghl/monitoring/trafficking/Docs/News/OrganTrafficking_study.pdf.
- Danovitch, G.M. and F.L. Delmonico. 2008. "The Prohibition of Kidney Sales and Organ Markets Should Remain". *Current Opinion in Organ Transplantation* 13 (4): 386–94.
- Fallahzadeh, M.K., L. Jafari, J. Roozbeh, N. Singh, H. Shokouh-Amiri, S. Behzadi, G.A. Rais-Jalali, M. Salehipour, S.A. Malekhosseini and M. Sagheb. 2013. "Comparison of Health Status and Quality of Life of Related versus Paid Unrelated Living Kidney Donors". *American Society of Transplantation* 13: 3210–4.
- Frey, B.S. and R. Jegen. 2001. "Motivation Crowding Theory". *Journal of Economic Surveys* 15 (5): 589-611.
- Garcia-Garcia, G. and V. Jha. 2014. "Chronic Kidney Disease (CKD) in Disadvantaged Populations". Clinical Kidney Journal 8 (1): 3–6.
- Ghods, A.J. and S. Savaj. 2006. "Iranian Model of Paid and Regulated Living-Unrelated Kidney Donation". *Clinical Journal of the American Society of Nephrology* 1: 1136–45.
- Gill, J., B.R. Madhira, D. Gjertson, G. Lipshutz, J.M. Cecka, P.T. Pham, A. Wilkinson, S. Bunnapradist and G.M. Danovitch. 2008. "Transplant Tourism in the United States: A Single-Center Experience". *Clinical Journal of the American Society of Nephrology* 3 (6): 1820–8.
- Gordon, E.J., C.H. Patel, M.-W. Sohn, B. Hippen and L.A. Sherman. 2015. "Does Financial Compensation for Living Kidney Donation Change Willingness to Donate?" *American Journal of Transplantation* 15: 265–73.
- Healy, K. 1999. "The Emergence of HIV in the U.S. Blood Supply: Organizations, Obligations, and the Management of Uncertainty". *Theory and Society* 28: 529–58.
- Hippen, B. 2008. "Organ Sales and Moral Travails: Lessons from the Living Kidney Vendor Program in Iran". *Cato Policy Analysis* 614. Available from: http://www.cato.org/pub_ display.php?pub_id=9273.
- Hippen, B. and A. Matas. 2009. "Incentives for Organ Donation in the United States: Feasible Alternative or Forthcoming Apocalypse?" *Current Opinion in Organ Transplantation* 14 (2): 140-6.
- Hossain, M.P., E.C. Goyder, J.E. Rigby and M. El Nahas. 2009. "CKD and Poverty: A Growing Global Challenge". *American Journal of Kidney Diseases* 53 (1): 166–74.
- Hughes, P.M. 2009. "Constraint, Consent, and Well-being in Human Kidney Sales". Journal of Medicine and Philosophy 34: 606-31.
- Human Tissue Authority (HTA). n.d. "Living Organ Donation FAQs". Available from: https:// www.hta.gov.uk/faqs/living-organ-donation-faqs.
- Kerstein, S. 2009. "Autonomy, Moral Constraints, and Markets in Kidneys". Journal of Medicine and Philosophy 34: 573-7.
- Khatami, M.R., N. Nikravan and F. Alimohammadi. 2015. "Quality and Quantity of Health Evaluation and the Follow-up of Iranian Living Donors". *Transplantation Proceedings* 47: 1092–5.
- Koplin, J. 2014. "Assessing the Likely Harms to Kidney Vendors in Regulated Organ Markets". The American Journal of Bioethics 14 (10): 7–18.

- Mahdavi-Mazdeh, M. 2012. "The Iranian Model of Living Renal Transplantation". *Kidney International* 82: 627–34.
- Matas, A.J. and M. Schnitzler. 2003. "Payment for Living Donor (Vendor) Kidneys: A Cost-Effectiveness Analysis". *American Journal of Transplantation* 4: 216–21.
- Meier-Kriesche, H.U. and B. Kaplan. 2002. "Waiting Time on Dialysis as the Strongest Modifiable Risk Factor for Renal Transplant Outcomes: A Paired Donor Kidney Analysis". *Transplantation* 74 (10): 1377–81.
- Mellstrom, C. and M. Johannesson. 2008. "Crowding Out in Blood Donation: Was Titmuss Right?" Journal of the European Economic Association 6 (4): 845-63.
- Moazam, F. 2006. *Bioethics and Organ Transplantation in a Muslim Society*. Bloomington: Indiana University Press.
- Moorlock, G., J. Ives and H. Draper. 2014. "Altruism in Organ Donation: An Unnecessary Requirement?" *Journal of Medical Ethics* 40 (2): 134-8.
- Muthusethupathi, M.A., S. Rajendran, M. Jayakumar and R. Vijayakaumar. 1998. "Evaluation and Selection of Living Related Kidney Donors: Our Experience in a Government Hospital". *Journal of Association of Physicians of India* 46: 526–9.
- Organ Procurement and Transplant Network (OPTN). n.d. "Living Non-Directed Organ Donation". Available from: https://optn.transplant.hrsa.gov/resources/ethics/living-non-directed-organ-donation/.
- ——. 2016. "National Data". Available from: https://optn.transplant.hrsa.gov/data/view-data-reports/national-data/.
- Reese, P.P., M.K. Simon, J. Stewart and R.D. Bloom. 2009. "Medical Follow-Up by Live Kidney Donors by One Year Following Nephrectomy". *Transplantation Proceedings* 41 (9): 3545–50.
- Rosen L., A.R. Vining and D.L. Weimer. 2011. "Addressing the Shortage of Kidneys for Transplantation: Purchase and Allocation through Chain Auctions". *Journal of Health Politics, Policy and Law* 36 (4): 717–55.
- Ross, L.F. 2002. "Solid Organ Donation Between Strangers". Journal of Law, Medicine & Ethics 30: 440-5.
- Rothman, S.M. and D.J. Rothman. 2006. "The Hidden Cost of Organ Sale". American Journal of Transplantation 6: 1524-8.
- Scheper-Hughes, N. 2002. "The Ends of the Body: Commodity Fetishism and the Global Traffic in Organs". SAIS Review 22 (1): 61-80.
- Scott, V. and W.E. Block. 2011. "Organ Transplant: Using the Free Market Solves the Problem". *Journal of Clinical Research & Bioethics* 2 (3).
- Segev, D.L., A.D. Muzaale, B.S. Caffo, S.H. Mehta, A.L. Singer, S.E. Taranto, M.A. McBride, and R.A. Montgomery. 2003. "Perioperative Mortality and Long-term Survival Following Live Kidney Donation". *Journal of the American Medical Association* 303 (10): 959–66.
- Sheehy, E., S.L. Conrad, L.E. Brigham, R. Luskin, P. Weber, M. Eakin, L. Schkade and L. Hunsicker. 2003. "Estimating the Number of Potential Organ Donors in the United States". New England Journal of Medicine 349: 667–74.
- Taylor, J.S. 2005. Stakes and Kidneys: Why Markets in Human Body Parts Are Morally Imperative. Hampshire: Ashgate Publishing Limited.
- Titmuss, R.M. 1997 (1970). The Gift Relationship: From Human Blood to Social Policy. Edited by A. Oakley and J. Ashton. London: LSE Books.

- United Network for Organ Sharing (UNOS). 2016. "Living Donation". Available from: https://www.unos.org/donation/living-donation.
- United States Bureau of Labor Statistics. 2012. "Occupations with High Fatal Work Injury Rates". Available from: http://www.bls.gov/iif/oshwc/cfoi/cfch0011.pdf.
- United States Department of Health & Human Services (USDHHS). n.d. "Why Minority Donors are Needed". Available from: http://www.organdonor.gov/whydonate/minorities. html.
- United States Renal Data System (USRDS). 2015. "Annual Data Report". Available from: http://www.usrds.org/adr.aspx.
- University of Alabama in Birmingham (UAB) Medicine. 2015. "Donors Help Extend UAB Kidney Chain to Record 51 Transplants". Available from: http://www.uabmedicine.org/-/ donors-help-extend-uab-kidney-chain-to-record-51-transplants.
- World Health Organization. n.d. "Human Organ Transplantation". Available from: http:// www.who.int/transplantation/organ/en.
- ——. 2010. "WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation". Available from: http://www.who.int/transplantation/Guiding_PrinciplesTransplantation_ WHA63.22en.pdf.
- Zargooshi, J. 2001. "Quality of Life of Iranian Kidney 'Donors'". *The Journal of Urology* 166: 1790-9.
- Zutlevics, T.L. 2001. "Market and the Needy: Organ Sales or Aid?" *Journal of Applied Philosophy* 18 (3): 297–302.