

## Commercial Renal Transplantation – Body Parts for Sale

A Vathsala,<sup>1</sup>MD, FRCP, FAMS

A 45-year-old Singaporean was seen for review by a nephrologist at a restructured hospital. She had been on follow up by a private nephrologist for management of chronic renal failure (CRF) due to diabetes mellitus. In January 2006, her serum creatinine level was 3.0 mg/dL. The options of dialysis and renal transplantation (RTx) had been discussed with her by her nephrologist; she opted to undergo renal transplantation. However, she did not wish to explore the option of live donor RTx (LDRTx) as she did not want to be beholden to her relatives after the transplant. She also did not wish to be on haemodialysis 3 times a week for 4 hours per session, or on peritoneal dialysis, daily 4 times a day, while awaiting a deceased donor RTx (DDRTx) in Singapore. She then arranged to go to China to obtain a pre-emptive kidney transplant there (she declined to state who assisted her in making the arrangements). She sought review in the restructured hospital before her travel to ensure that she would be followed up there after her transplant.

The burden of kidney failure worldwide is high. In Singapore, the incidence of end-stage renal failure (ESRF) was 162 per million population (pmp) in 1998.<sup>1</sup> Forty to 50 ESRF patients pmp may benefit from renal transplantation; however, the RTx rate in 2005 was 18.6 pmp,<sup>2</sup> leaving a shortfall of approximately 20 to 30 pmp of ESRF patients who can be transplanted but are not. Although many of these patients could opt for LDRTx, most do not for several different reasons. The reasons cited include the lack of medically suitable family members, unwilling family members, or an unwillingness even to explore the possibility of LDRTx, as in the case reported above. As a result, patients remain on maintenance dialysis, producing an ever increasing dialysis population. However, in a world in which almost everything appears to be for sale, kidneys are sold for the purpose of transplantation. Thus, it is no surprise that some patients, as in the case above, take the risk and source for commercial RTx.

The sale of organs is prohibited by law in most countries in which there is legislation regarding transplantation. In Singapore, it is a criminal offence under the Human Organ Transplant Act of 1987, and punishable with a fine or imprisonment, to enter into a contract or make arrangement for the sale of blood or a human organ. However, many countries do not have, or are only now enacting, such legislation. Indeed, there are many countries in the world which have become havens for commercial RTx, where an

individual can purchase a kidney from either a deceased or live unrelated donor for the purpose of transplantation. Historically, the majority of countries which permit commercial RTx have been from the developing world – for instance Brazil, China, Egypt, India, Iraq, Pakistan, Philippines, Rumania, Russia, South Africa, Turkey and Venezuela.<sup>3</sup> Middlemen from these countries often advertise their services, arrange for donor evaluation to assess suitability, match donors to prospective recipients, and arrange for the kidney procurement surgery and the subsequent kidney transplantation into the recipient. Given their hefty price, the recipients of commercial RTx are those, largely from wealthy nations, who can pay for them.

The ease and relatively low cost of international travel, and the Worldwide Web, have further contributed to the recent proliferation of commercial RTx (as they have to other illicit practices such as child pornography). Recently, a commercial Brazilian renal donor and his Israeli recipient both travelled to Durban, South Africa, to undergo the kidney procurement and transplant procedure respectively, in a hospital there, showing the extent to which commercial RTx has crossed international barriers.<sup>4</sup> In this particular instance, the Brazilian donor received \$3000, for him a princely sum, while the recipient paid \$120,000. The middlemen from both Israel and Brazil who were involved with this particular transplant were arrested, as was the Israeli kidney recipient, all for the trafficking of organs. The internet has even become an avenue to advertise organ sales and to solicit organs. An electrician from Suffolk, England, advertised his kidney for sale for £100,000, highlighting the spread of commercialisation of organs to even the developed nations and into an upmarket location.<sup>5</sup> The establishment, in 2004 in the USA, of a website that matched commercial donors to recipients has brought even greater visibility and perhaps even an air of legitimacy to commercial RTx.<sup>6</sup>

Is commercial RTx then here to stay? Apart from the legal ban against the sale and trafficking of organs, are there any other reasons to advocate for or against the sale of organs?

There are many arguments for accepting or even embracing commercial RTx as a means to alleviate the shortage of kidneys for RTx. Firstly, there is a public clamour to meet the growing needs of the ESRF population for RTx. The number of patients on dialysis or on transplant waiting lists increases steadily while the kidney supply

<sup>1</sup> Director, Renal Transplantation and Senior Consultant, Department of Renal Medicine  
Singapore General Hospital, Singapore

Address for Correspondence: Dr A Vathsala, Department of Renal Medicine, Singapore General Hospital, Outram Road, Singapore 169608.

remains stagnant. Even renowned ethicists, economists, surgeons and physicians, generally from the developed world, have written treatises on why sale of organs should be permitted.<sup>7-9</sup> Indeed, the moralists among them claim that it is society's moral duty to save lives. The utilitarian approach has been to suggest that selling kidneys should be no different from other commodities – as long as there is someone to buy a kidney, all that remains is regulation and ensuring that logistics and standards of care are met before proceeding with the sale. The utilitarians say that altruism and legislation have failed to provide enough organs to meet the needs; that selling a kidney should be a matter of personal choice; and that denying this opportunity to individuals is akin to adopting a paternalistic attitude to those who should and can make their own decisions. Indeed, in the March 2006 issue of *Kidney International*, Friedman and Friedman argue for not only the sanction of commercial RTx but also its regulation by a federal agency.<sup>9</sup> They suggest that payment for a kidney (suggested price US\$40,000 per kidney to donors) should be legalised in the USA to alleviate the organ shortage. They suggest that a federal agency to manage marketing and purchase of donor kidneys in collaboration with the United Network for Organ Sharing might be financially self sustaining as the reduction in costs of dialysis would balance the expense of payment to donors. They suggest that an open market would in fact curb the black market and thereby prevent botched-up organ transplants. Regulation would prevent the middleman from profiteering, and instead allow the entire benefit of the sale of the kidney to be accrued to the donor.

However, those who are against the sale of organs note that the sale of organs devalues the human body, and that it is inherently unjust; the poor and disadvantaged are most often the sellers while the wealthy are the buyers.<sup>8,10</sup> They further argue that condoning the sale of organs would create injustices and inequity in access to health care. Of interest is the economist George Soros' view of "The Capitalist Threat".<sup>10</sup> Although not directly referring to the sale of organs, Soros, himself a veritable capitalist, suggests that "*laissez-faire capitalism and the spread of market values into all areas of life is endangering our open and democratic society*". Nowhere is this more evident than in advocating the sale of organs – society may have a duty to save lives and relieve human suffering, but not by any means whatsoever. The concept of injustice to donors has been strengthened by data suggesting that paid donors came from the poorest segments of society. Therefore, they are often exploited by middlemen and may not even receive their promised fees.<sup>11</sup> Furthermore, there have been reports suggesting that those selling organs rarely sustain long-term benefit financially. Studies suggest that, due to the inadequacy of screening of donors in the environment of commercial transplantation, safety issues are often ignored.

Outcomes of commercial RTx have been reported to be worse than that of local transplants, the former being complicated by infections such as hepatitis and HIV-AIDS.<sup>12</sup> Finally, an environment that is permissive to commercial RTx may inhibit the growth and development of local transplantation programmes.

In conclusion, advocating the sale of organs is not the best treatment for organ failure. Preventing renal failure by optimally treating diabetes and controlling hypertension, ameliorating the progression of chronic kidney disease, advocating and encouraging ethical LDRTx, and promoting DDRTx are better holistic approaches to treating renal failure. Indeed, Dr Nicolas Tilney, President-elect of the International Transplantation Society states "*In the worst instances, this unfortunate niche market has led some to the self-serving belief that they have property rights over the spare parts of the poor.*"<sup>13</sup> Whether the arguments are based on legal, moral or economic viewpoints, it is time for the medical fraternity to have a more active role in preventing the sale of organs; we need to choose between two moral values - the value we place on alleviating suffering even at the cost of dehumanising other human beings, versus the value we place on meeting human needs in a fair and equitable manner.

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