

COMMERCIALISATION OF THE SUPPLY OF ORGANS FOR TRANSPLANTATION

By

C.M. Thomas

**School of Accountancy
College of Business
Massey University
Palmerston North
New Zealand**

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School of Accountancy
Massey University
Private Bag 11222
Palmerston North
New Zealand

Telephone: (06) 350 5799 extension 2158
Facsimile: (06) 350-5617
Email: C.Van-Staden@massey.ac.nz

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ABSTRACT

Internationally, there is a shortage of organs available for organ donation. Human tissue and cells are becoming increasingly valuable as part of commercially valuable biotechnological research. The developments have outstripped the existing legal controls and have led to concerns about the use of human tissue retained after post mortems in England and Australia and the growth of black markets dealing in human organs and tissue. There is a need for ethical discourse about the extent to which such developments should be recognised and controlled by the law. Further, if the supply of organs available for transplantation is to be increased, the systems of consent in many countries are unsuitable. Development of a system in which benefits are available to the donors or their families may increase the supply of organs. If financial benefits are available from biotechnological advances, the people providing the necessary materials in the form of human tissue or organs may believe they have a right to share in the resultant benefits.

This paper considers the ethical issues arising from the various systems of consent to organ donation that have been adopted in different jurisdictions. Fundamental to any such debate is the issue of property rights- whether a living person has property rights over their own body and whether there exist property rights to a human body following death. The role of the State is fundamental to such a debate. This paper considers the potential for the commercialisation of the supply of organs and some approaches that might facilitate commercialisation. Aspects of the law contract that might arise are outlined.

Overall, the conclusion is that these issues must be addressed by way of legislation. If commercialisation is permitted in some form, this must be carefully controlled to ensure that the vulnerable members of Society are not disadvantaged. It is suggested that any benefit should be provided by the State rather than by way of individual contracts between donor and recipient, to avoid the situation arising where only the financially advantaged could afford treatment.

INTRODUCTION

Ethical debate is increasing as to whether the human body should be viewed as a collection of potential “spare parts”. Up until the early 1960’s, parts of the body were of little use to others, as organ rejection meant attempted implantation would fail. The first successful transplant between unrelated persons occurred in 1962. Since that time, the demand for human tissue has far exceeded the supply. Human tissue includes bones, tendons, heart valves, corneas, skin and other body parts. Tissues and cells may form part of commercially valuable biotechnological research.¹ Even human fat has use in research in providing stem cells, which have the ability to become anything in the body, from nerves to bone and muscle.² It appears likely that at some future time the shortage of organs may be overcome by the cloning of organs,³ however the time span in which the technology may be developed is unclear and in the meantime people are dying while waiting for donor organs.

This paper considers the ethical issues arising from commercialisation of tissue and organ donation and the present legislative framework in New Zealand. It examines a variety of procedures that might be formulated to increase the available supply of human body parts. Fundamental to any such debate is the issue of property – whether a living person has property rights over their own body and whether there are property rights to a human body following death. The extent to which the law should develop to facilitate the medical procedures that are technically possible is a matter of ethical debate. However the tyranny of the possible leads medical experts and desperate patients to want to do anything that it is possible to do to maintain life and extend the boundaries of medical developments.

AVAILABILITY OF ORGANS

In current transplantation practice, an ever-widening gap exists between the number of organs needed for transplantation and the number of organs donated. At any one time, as many as 400 New Zealanders may be waiting for an organ transplant. Approximately 350 of those will be waiting for a kidney transplant. Many more people will be awaiting tissue transplants including corneas, heart valves, skin and bone.⁴ In the period between 1993 and 1999 the number of organ donors varied from 34 to 46 per year. This donation rate places New Zealand 16th in the list of international donor rates with 10.2 donors per million population, narrowly ahead of Australia with 8.6 donors per million. For organs to be removed for transplant, the donor must have died in an intensive care unit and be brain dead. In New Zealand, although 104 of the 1,404 people who died in intensive care

¹ *Moore v Regents of the University of California* 793 P.2d, 479, 481 (Cal. 1990)

² Researchers at the University of California and the University of Pittsburgh claim to have isolated human stem cells from fat sucked out of patients during routine liposuctions: Dominion, Wellington, 11 April 2001.

³ Dominion, Wellington, 17 March 2001.

units in the year to 31 March 2000, were potential donors, organs were retrieved from only 36. About 100 people received transplants from those 36 donors. One cause of the low number is the difficult issue of dealing with grieving families.⁵ There are many more people needing organs than donors available and many healthy organs are buried or cremated. At first sight it seems that this is a waste of resource that might be used to improve the life of others.

This problem is widespread throughout the world. According to the U.S. Department of Health and Human Services, only about 5,500 deaths of an estimated 8,000-15,000 deaths of suitable donor candidates each year lead to organ donation. Meanwhile the number of people waiting for organs grows. This is now estimated to be more than 63,000 of whom 4,000 will die each year while they wait⁶. In 1999, 6,448 people in the United States died while waiting for an organ transplant, 3,088 of them were waiting for a kidney, and 1,767 for a liver.⁷

ETHICAL ISSUES

The belief that the State should facilitate organ donation to prevent the waste of such a valuable resource is premised on the argument that humans are born into a family and into a community and their bodies should be viewed as community resources. If it is believed that the refusal of a dead person's family to allow organs to be taken for transplantation is morally wrong, then it is logical to override it. This could be achieved by allowing medical professionals to routinely remove cadaver organs, with no need to obtain consent from the family, or the deceased person prior to death. If it is believed that the donation of organs is a desirable social aim, then if altruism is insufficient to meet the need, there may be justification for compensating the family for donated organs. Alternatively, it may be possible to allow arrangements whereby a person is able to make a binding arrangement to donate their body after death, in return for some benefit during their lifetime.

In New Zealand, the Human Tissue Act 1964 provides that where the donor has made a specific request that his or her body or a specified part of it be used, the person lawfully in possession of the body may authorise the removal of organs according to the request.⁸ This Act appears to give legislative approval to a system in which organs are donated, but not to a system in which they are routinely taken without permission, or sold as commodities on the open market.

In general, donations during the donor's lifetime of blood, bone marrow, or even a kidney, which involve either replenishable or paired organs, are significantly different from donations of heart, lung or liver which have traditionally been harvested from a dead donor. However, techniques are

⁴ "Organ Donation – the gift of life", <http://www.donor.co.nz/why.html>.

⁵ Streets "Study of Deaths in Intensive Care Unit", Dominion, Wellington, October 2000.

⁶ The Lancet (editorial), "Paying Respect to Organs" (1999) 353 *The Lancet* 2085.

⁷ United Network for Organ Sharing: unpublished data, 6 May 2000.

⁸ HTA 1964 s3(1).

developing to enable a portion of the liver or lung to be donated by a living donor. Blood is usually donated in circumstances where the recipient is unknown to the donor. In recent years the number of kidney donations from living unrelated donors has increased. These donors are mainly spouses of the recipients, but have also been donations from friends or acquaintances or even strangers. Concerns about the reality of consent arise in such an emotive situation, particularly when the donor is a spouse. The increased pressure for organs and the desire of transplant surgeons to meet that need may lead to the tyranny of the possible – the pressure to suppose that we are obligated to do whatever we are able to do.

Equally concerning is the movement toward considering the human body as a collection of alienable spare parts. This may have a dehumanising tendency. Further, if cadaver organs are viewed as a community resource this may ignore the cultural significance of burial. As stated by Gilbert Meilander: “Our society’s desperate attempt to find ways to live longer should not be allowed to override a deep-seated and difficult to articulate sense of the importance of the body, even the dead body”.⁹

In recent years we have heard stories of children conceived in order to serve as bone marrow donors for family members and even the use of in vitro technology to ensure the foetus implanted will be genetically suitable for transplant. Increasingly, there are arguments that we should permit the sale and purchase of organs and even in countries where such practices are illegal, poverty may lead to the sale of organs such as kidneys.¹⁰

The reality is that, irrespective of public policy, most people will do anything possible to keep themselves or their loved ones alive. Because of this vulnerability, society is helpless in the face of the relentless advance of technology.

PROPERTY RIGHTS IN HUMAN BODIES

Any discourse relating to the commercialisation of human organs involves the fundamental premise of the existence of property rights in the human body. In order to sell organs such as kidneys or to determine who has lawful possession of a body, people would need some recognised ownership or property rights in their own bodies and their component parts. The common law has presumed there are no property rights in a dead body but only the quasi-property rights of the executor or administrator to claim a corpse for burial purposes.

A Living bodies

⁹ Gilbert Meilander, “Second Thoughts about Body Parts” (April 1996) 62 *First Things*, 32-37.

¹⁰ Reuters, “Selling organs discouraged”, 13 November 2000.

At common law, living bodies were often categorised as property. Under English common law, a debtor could be attached to act as payment for a debt.¹¹ A woman's body was the property of her husband. Consequently a man who raped a woman was tried for a property crime against her husband.

Courts and legislatures have accepted that renewable body parts can be the subject of ownership. Blood is commonly sold in America and is deemed to be full-fledged property – a “product” whose sale constituted “income” under the tax code, while the “business expenses” incurred by the seller in creating this “product” are deductible for the purposes of tax.¹² There has been recognition of property in hair, urine and bone marrow. These, together with the existence of sperm banks, all indicate that individuals have proprietary rights over their body.

The issues arising are demonstrated by the Californian case *Moore v Regents of the University of California*¹³. The plaintiff, John Moore, sought treatment at the Medical Centre of the University of California for hairy-cell leukaemia. Dr David Golde examined Moore and determined that his spleen had to be removed as a necessary part of his treatment. Dr Golde, together with a medical researcher and UCLA employee decided that Moore's spleen cells were unique and of great commercial value. Moore's spleen was removed and genetic engineering used to develop a cell-line with an estimated commercial value of three billion dollars. Moore had not been informed nor had he consented to this use. For seven years he returned to UCLA for what he believed was treatment of his condition. During these visits, samples of Moore's blood, blood serum, skin, bone marrow aspirate and sperm were taken for research. Moore was never informed of the value of his tissue. He was told that it had no commercial or financial value. He signed a form consenting to the removal of his tissue but he expressly denied the rights to his cell-line. However they continued to commercially exploit his cell-line and only responded to Moore's refusal by altering the name of the cell-line to avoid detection. When Moore eventually discovered these actions he sued seeking damages for conversion of his spleen.

The Californian Court of Appeal held that Moore's spleen was an item over which he had “an unrestricted right to ... use, enjoyment and disposition and thus it fit under the traditional legal provisions of property.”¹⁴ The Court held that Moore could claim that the defendants had converted his tissue and denied that Moore had abandoned his spleen.¹⁵ The Court noted that the potentially “intense moral, religious and ethical concerns” which could accompany the use for sale of a person's body or body part without consent made an inference of abandonment, even with a diseased organ, “inappropriate”.

¹¹ *United States v Garber*. 607 F. 2d, 92, 97 (5th Gr. 1979).

¹² See P. Matthews, “Whose body? People as property” (1983) 36 *Current Legal Problems*, 193.

¹³ 202 Cal. App. 3d 1230; 249 Cal. Repr. 494 (Cal. Ct. App.); 252 Cal. Repr, 816; 763 P.2d, 479 (1988).

¹⁴ 202 Cal. App. 3d 1245; 249 Cal. Repr at 504.

¹⁵ *Ibid* at p 510.

However, the California Supreme Court¹⁶ found that unlike blood, spleen cells are not considered to be the property of the person from whose body they are withdrawn. Spleen cells may become the property of the scientists who harvest them and transform them into a valuable cell-line, once the government issues a patent thereby conferring a proprietary interest. Moore's tort claims for breach of fiduciary duty and lack of informed consent for removal of his spleen were allowed by the Californian Supreme Court but not his claim for conversion of his personal property. Thus he was denied a right to recoup his share of the profit made from the valuable cell-line derived from his spleen.

Moore affirms the individual's right to exclude others from taking his spleen from his body while it simultaneously protects the researcher's rights in the resultant cell-lines.

Radhika Rao¹⁷ argues that *Moore* is capable of at least three different constructions:

1. The Court's refusal of Moore's conversion claim was recognition that body parts cannot be property so long as they are contained in a living human being. Rao states that in the case the Court could have recognised Moore's ownership of his spleen at the point it was detached from his body, without making his whole person a form of property.
2. Even if the spleen was initially Moore's property, it had been abandoned by its "owner", for whom the diseased organ was valueless, and so was available to be used by another.
3. The Court may have implied that body parts once removed, return to the public commons available to all and become a form of communal property available for "capture" by the first person who recognises their commercial potential and puts them to productive use.

Moore's case demonstrates the need to develop policy and legislation to keep pace with rapid technological developments. Common law views of property may be inadequate in light of such developments.

¹⁶ 793 P. 2d, 479, 479-97 (Cal 1990).

¹⁷ "Property, Privacy, and the Human Body", 80 *Boston University Law Review* 359 (2000) at 374.

B Dead Bodies

A person's physical presence in the form of their body is central to their sense of self. Consequently, it appears paradoxical that the law specifically makes provision for the enforcement of the person's wishes with respect to their property after death, while at common law it is questionable whether there is property in a dead human body.¹⁸

The issue as to whether property rights exist in a dead body has been in question since the seventeenth century.¹⁹ Sir Edward Coke suggested that as the burial of a corpse is "nullius in bonis" – "in the goods of no one" then there could exist no property rights in them. This statement was recognised in common law cases and led to the general rule that human body parts cannot be property.²⁰ As stated in *Clerk and Lindsell*²¹, the executors or administrators or other persons charged by the law with the duty of interring the body have a right to the custody and possession of it until it is properly buried. There are other persons charged by the law with the duty of interring the body, such as the parent of an infant child who dies where the parents have the means to provide for burial.²² There does not appear to be such a duty on next-of-kin as such.²³ If there is no duty, there is no legal right to possession of a corpse.

However, once a body has undergone a process or other application of human skill, stuffing or embalming, it seems it can be the subject of property in the ordinary way. The proposition is based on the case of *Doodeward v Spence*.²⁴ That Australian case involved the preserved foetus of a two-headed child, stillborn 40 years previously, which the appellant had purchased. He sought to recover it from the police so that he could exhibit it for gain. He succeeded in an action for detinue. In the High Court of Australia, Griffith C. J. stated that it was not unlawful to possess a mummy or a prepared skeleton or a skull or other parts of the human body. He referred to the many collections of anatomical and pathological specimens formed and maintained by scientific bodies.²⁵

He stated "... so far as it constitutes property, a human body, or a portion of a human body, is capable by law of becoming the subject of property."²⁶ He added; "when a person has by the lawful exercise of work or skill so dealt with a human body or part of a human body in his lawful

¹⁸ With respect to the disposition of property, see the Wills Act (UK) 1837 (as amended). The executor of a deceased person is entitled to custody of the body and has a duty to bury it: *Williams v Williams* [1881-5] All ER Rep 840; 20 ChD 659.

¹⁹ 3 Edward Coke, *Institutes of the Laws of England*, 203 (1644).

²⁰ See William Boulier, "Sperm, Spleens and other valuables: the need to recognise property rights in human body parts" 23 *Hofstra Law Review* 693, 693 (1993). See also *Williams v Williams* (1882) 20 Ch D 659, at 662-663 and *Clerk and Lindsell on Torts* (17 ed 1995) p 653 para 13-50.

²¹ *Ibid* n18.

²² *Clark v Landon General Omnibus Co Ltd* [1906] 2 K.B. 648 at 659.

²³ *Dobson and Another v North Tyneside Health Authority and Another* [1996] 4 All ER 474 at 478.

²⁴ (1908) 6 CLR 406.

²⁵ *Ibid* at p 413.

²⁶ *Ibid* at p 414.

possession that it has acquired some attributes differentiating it from a mere corpse awaiting burial, he acquires a right to retain possession of it, at least as against any person not entitled to have it delivered to him for the purpose of burial...”

Although Barton J. reinforced the general rule that an unburied corpse was not the subject of property, Higgins J. dissented, being of the view that no one could have property in another human being alive or dead. He stated “A right to keep possession of a human corpse seems to me to be just the thing which the British law and therefore the New South Wales law, declines to recognise.”²⁷

In *Dobson and another v North Tyneside Health Authority and another*,²⁸ the English Court of Appeal considered the issue in a case where the next of kin of a woman who had died of a brain-tumour were contemplating legal action on the grounds of negligent misdiagnosis. They wanted the hospital to produce the brain, which had been removed at post mortem but not sectioned for histology. The hospital could not do so. The Court held that while it was “arguable” that a body or body part that had been embalmed or fixed might become property, a brain held in storage but later lost or destroyed was not. The Court did not wish to impose on hospitals a duty to retain tissue removed at post mortem just in case it was required for any future litigation.

The issue arose again in another context in *R v Kelly, R v Lindsay*²⁹, a case where the body parts were “stolen” from the Royal College of Surgeons in London to be used for artistic purposes. It was argued on appeal that the trial judge had been wrong to say that these preserved body parts were property in the *Doodewood* sense. It was argued that the Royal College might have been custodian of the parts, but since they were not property it could not own them so they could not be stolen.

Lord Justice Rose stated, with respect to the issue whether or not a corpse or part of a corpse is property, that however questionable the historical origins of the principle, it has now been the common law for 150 years at least, that neither a corpse nor parts of a corpse are in themselves capable of being properly protected by rights. However if they have acquired different attributes by virtue of the application of skill, such as dissection or preservation techniques for exhibition or teaching purposes, they are capable of becoming property.

He went on to add that the common law does not stand still, so the courts might, in the future, hold that body parts are capable of being property, even without the acquisition of different attributes, if they have a use or significance beyond their mere existence. He stated, as examples, where they are intended for use in an organ transplant operation, for the extraction of DNA, or as an exhibit in a trial. Thus the legal position remains unclear.

²⁷ Ibid at p 424.

²⁸ [1996] 4 All ER 474.

²⁹ [1998] 3 All ER 741.

In New Zealand, in addition to the common law, certain requirements apply by virtue of the Human Tissue Act 1964, the Coroners Act 1988 and the Code of Health and Disability Services Consumer's Rights. If organs and tissues are taken from a dead body for any reason other than to determine the cause of death, then the Human Tissue Act 1964 becomes applicable. Section 3 of the Human Tissue Act 1964 relates to the removal of human body parts for therapeutic purposes or for medical education or research.³⁰ In the case of bodies lawfully in the possession of the coroner by virtue of the Coroners Act 1988, the coroner's consent needs to be sought for the removal of organs where an inquest or post mortem may be required. The circumstances in which these may be required are set out in section 4 of the Coroners Act 1988 and include deaths on the operating table and deaths while under the effect of anaesthetic. Often such deaths are of people suitable for organ donation. The coroner would be the person lawfully entitled to possession of the body.³¹

The Code of Health and Disability Services Consumer's Rights³² provides in right 7(9) the every consumer has the right to make a decision about the return or disposal of any body parts or bodily substances removed or obtained in the course of a health care procedure. Right 7(10) provides that any body parts or bodily substances removed or obtained in the course of a health care procedure may be stored, preserved, or utilised only with the informed consent of the consumer. Consumer includes a person entitled to give consent on behalf of that consumer.³³ This would indicate that if the consumer dies during the procedure the requirements of informed consent would apply to those relatives able to object to the donation by virtue of the provisions of the Human Tissue Act 1964.

The uses for human tissues and body parts are rapidly increasing with the remarkable advances in modern medicine. Scientists seeking unimpeded access to human tissue argue that restraints on their ability to gain access to, manipulate, and commercialise tissue obstruct the progress of research and deprive society of useful medical advances. However, a corpse is more than a utilitarian object; it is subject to conflicting beliefs and to many cultures has a sacred meaning.

REASONS FOR SHORTAGES OF ORGANS

It is indisputable that there is a shortage of organs for transplantation. In many cases, such as kidney transplantation, the successful transplant should result in substantial savings of medical expenditure on on-going treatment, which would otherwise be necessary should a transplant not be available. This paper will now consider the reasons for the shortage of organs and some possible strategies to increase the supply of organs.

³⁰ The systems of consent under the Human Tissue Act are considered below at n36 following.

³¹ Human Tissue Act 1964 s3 (5). Note that the coroner would also have to comply with ss3 and 5 of the Human Tissue Act and before giving the authorisation for the collection of organs, make the necessary enquiries stipulated in those sections.

³² <http://www.hdc.org.nz/about/rghs.html>.

³³ The Code of Health and Disability Services Consumer's Rights, 4.

A Donors

Many people have a personal reluctance to either donate or to take positive steps to donate organs. Reasons include denial of mortality, fear that doctors will use less effort to save the donor patient's life in order to harvest the organs, opposition due to religious or cultural belief that the body should be interred complete, and disgust at the idea of having organs removed.

Although some of these may be difficult to overcome, education programmes can overcome concerns that doctors may not do everything practicable to save the life of the donor. Most countries adhere to the Guideline Principles of the World Health Organisation for Organ Transplantation. Guideline Principle 2 states "Physicians determining that the death of a potential donor has occurred should not be directly involved in organ removal from the donor and subsequent transplantation procedures, or be responsible for the care of potential recipients of such organs."³⁴ Even if such concerns are addressed by way of education programmes and by procedures being established which make it easy for prospective donors to "opt-in"³⁵, this does not overcome difficulties following the death, especially with refusal by family members.

B Next-of-kin

The next-of-kin may be reluctant to authorise the harvest of organs, even if a patient has completed the steps that are necessary to indicate willingness to donate, such as having the requisite entry on their driver's license or carrying a donor card (as is required in many U.S. States). This may be because of the next of kin's cultural or religious values or because of an inability to make such a decision at the time of intense emotional trauma. The patient is likely to be in intensive care being maintained on life support and family may not be able to accept that the patient is actually brain dead, while they still appear to be alive.

SYSTEMS OF CONSENT

A. Altruism as applied in New Zealand

In New Zealand, the Human Tissue Act 1964 (the HTA) regulates the donation of cadaveric organs for transplant. It provides:

³⁴ *Human Organ Transplantation: A Report on Developments Under the Auspices of WHO (1987-1991)* 8 (World Health Organisation ed., 1991).

³⁵ In New Zealand donors state their willingness to donate on their drivers' licenses, which are required to be carried at all times when driving.

1. Organs may be removed for therapeutic use if the donor has made a specific request that his/her body or a specific part of it be so used. This may be in writing, or oral in the presence of two witnesses during the donor's last illness;
2. The person lawfully in possession of the body may authorise the removal of organs according to the request;
3. The person lawfully in possession of the body is not required to act on the request. In practice, this discretion means donation does not occur if opposed by the immediate family³⁶;
4. If no request has been made, the person lawfully in possession of the body may authorise removal of the organs for therapeutic purposes, if after such reasonable enquiry as may be practicable, that person has no reason to believe that the deceased had expressed an objection to such use, or that the surviving spouse or relatives so object.³⁷

If authority has been given in these circumstances both the removal and transplantation are lawful, provided that they are performed by a registered medical practitioner.³⁸ The medical practitioner must be satisfied by a personal examination of the body that life is extinct.³⁹

The person with the decision-making authority is the person lawfully in possession of the body. The Act specifies that a person entrusted with a body for the purpose only of its burial or cremation cannot give the authority for the removal of organs.⁴⁰ Section 2 states that without limiting the rights, powers or duties of any person entitled under any rule of law to the possession of any body, for the purposes of the Act, the Medical Superintendent or other medical officer in charge of any hospital or the Superintendent of any penal institution is deemed to be lawfully in possession of any body lying in the relevant institution.

The hospital's right to possession exists from the Act, but cannot limit the relatives' or the executor's right "under any rule of law". Consequently, if a relative or executor claims that possessory right, it is the relative or executor who has the power to authorise removal and transplantation of organs. The hospital can only act in the absence of their right being asserted. Many doctors would find it distasteful to take organs in the face of family opposition whether or not the patient had consented during their lifetime and whether or not the law permitted such an action.

³⁶ Kidney Foundation of New Zealand, *The Gift of Life* (A special Publication of the National Kidney Foundation of New Zealand to promote organ donor awareness), Wellington 1995, at p 3.

³⁷ Section 3(2) HTA.

³⁸ Sections 3(3), 3(4) and 2(1) HTA.

³⁹ Section 3(4) HTA.

⁴⁰ Section 3(6) HTA.

The Code of Practice for Transplantation of Cadaveric Organs states that, if the deceased has expressed a wish in accordance with the Act that the relevant parts of their bodies be used after their death for therapeutic purposes, there is no legal requirement to establish lack of objection on the part of the relatives.⁴¹ The Code does recognise the reluctance of medical professionals to harvest organs over the objections of relatives, by providing that the person lawfully in possession of the body may in such circumstances decline to authorise the removal.⁴² This provision may also have resulted from recognition of the common law rights of relatives over the remains of family members. Such rights override the wishes of the deceased.⁴³ The 1989 amendment to the Human Tissue Act was passed after the 1987 Code of Practice was formulated. It retained the subsection in the same form; meaning relatives still do not have to be consulted before the removal of organs where the deceased has made a request that they be removed.⁴⁴

Doctors may find difficulty in approaching families at such a time. In a study of deaths in New Zealand intensive care units in the year to 31 March 2000, of the 104 people who died in intensive care units, consent was not sought from 16 potential donors because the doctors felt the family's circumstances made it extremely difficult. Of the 104 patients who died organs were retrieved from only 36. The main reason for the low rate of harvest was that doctors did not carry out a test to certify brain death on 118 patients who had catastrophic brain damage and may have been brain dead.⁴⁵

People who have taken positive steps to indicate a willingness to donate, such as the entry on their driver's license, may believe that their request is binding and may not realise that the practice is to comply with the wishes of relatives. If the HTA was amended to require such an expressed request to donate to be followed, except in specified exceptional circumstances, this should increase the supply of organs in a manner that would be acceptable to the community.

The HTA does not expressly prohibit the selling of organs and only applies to tissue from a dead body. It does not apply to decisions made by a living person about donations of body substances such as bone marrow or blood. These are dealt with under the Health Amendment Act 1998 which inserted Part 3 A into the principal Act to deal with trading in human blood and controlled human substances. In the Amendment Act, "blood" means human blood and includes a substance derived from blood, a human organ, or human bone marrow or human tissue, including the placenta, of a kind that is suitable as a source from which to derive a constituent of blood that may be used

⁴¹ *A Code of Practice for Transplantation of Cadaveric Organs*; Department of Health, Wellington, 1987 at p 2.

⁴² *Ibid* at p 2.

⁴³ Susan Pahl, "The Removal of body parts: The legal position" [1993] *New Zealand Law Journal* 144.

⁴⁴ The Human Tissue Act was amended in 1989, so that people who indicated their wish to be organ donors when applying for their driver's licences could have these wishes recorded on a Health Computer system under the control of the Director General of Health. The system was to enable the establishment of a centralised system able to be accessed by hospitals.

⁴⁵ "Death tests could ease organ need", *Dominion*, Wellington November 2000.

therapeutically, or in the preparation of a substance for therapeutic use or a constituent thereof. It also includes human haematopoietic stem cells and their constituents.⁴⁶

A “controlled human substance” means bone marrow or a constituent of bone marrow or any other substance of the human body that may be used therapeutically which the Governor-General by Order in Council has declared to be a controlled human substance.⁴⁷ No such regulations have been made. Trading in blood and controlled human substances is prohibited under the Act as is charging for administered blood or controlled human substances.

Thus, unless organs are declared by regulation to be a substance of the human body, which may be used therapeutically, there is no legislation in New Zealand prohibiting the sale of organs. However, there are ethical considerations that apply, irrespective of the law.

The system in New Zealand is premised on the altruism of the donor and/or the next of kin. Where the deceased has made no request to donate, the person lawfully in possession of the body must make inquiries to establish the neutrality of the donor and the feelings of the surviving spouse and relatives. What is required is “such reasonable enquiry as may be practicable”. Skegg has suggested that generally all that is required is to enquire of “either the spouse or a close relative whether he or she has reason to believe that the deceased had expressed an objection, whether some other person whose objection is relevant, objects.”⁴⁸

The Human Tissue Act 1964 is a compromise between “contracting in” (the view of the deceased being conclusive) and “opting out” (the personal or family veto). The manner in which the Act has been applied in practice favours the relatives at the expense of the wishes of the deceased, or the needs of a donor. Such a system has a major flaw – it results in far fewer organs being available than are needed. Other jurisdictions have adopted a variety of systems to address this shortage.

B United States

In 1968 the National Conference of Commissioners on Uniform State Law approved the Uniform Anatomical Gift Act (UAGA). By 1973, all fifty states as well as the District of Columbia had adopted the Act or some variation of it. The UAGA provided that no organs would be removed for transplantation without explicit authorisation for organ donation. As a consequence of the shortage of organs, the UAGA was amended to grant a coroner a limited discretion to take organs. The coroner was required to make “reasonable efforts” to notify the appropriate person and obtain consent for donation. If consent was not forthcoming, the coroner was independently authorised to

⁴⁶ Section 92A.

⁴⁷ Section 92A.

⁴⁸ P.D.G. Skegg, “Human Tissue Act 1964”. (1976) 16 *Medicine, Science and the Law*, 197. See also *Code of Practice for Transplantation of Cadaveric Organs* (Department of Health Wellington) 1987.

remove the organs or foetal tissue. The amended UAGA included all organs within its reasonable efforts provision.⁴⁹

Not all states followed the amended UAGA. Some retained the status quo, while some adopted a presumed consent approach, permitting the coroner to remove corneal tissues and pituitary glands, where removal would not interfere with the deceased's facial appearance and if the coroner knew of no objection by the deceased or the next of kin.

Congress has expressly prohibited receiving compensation for human organs. The National Organ Transplantation Act of 1984 (NOTA) stated "It shall be unlawful for any person to knowingly acquire, receive or otherwise transfer any human organ for valuable consideration for use in human transplantation."⁵⁰ However they exempted replenishable tissues like blood and sperm.

In the United States, several courts have concluded that the next of kin have a constitutionally protected property interest in the dead body of a relative.⁵¹ The Fifth Amendment ensures that the Federal Government cannot take private property for public use without just compensation.⁵² If future courts find that United States' presumed consent provisions are unconstitutional, the amended UAGA would be effectively abrogated and coroners would be unlikely to take organs from a body for fear of being sued. The United States' courts need to clarify the issue of property interest in dead bodies, to determine whether the State may take organs after reasonable inquiry for objections or whether organs may not be taken in the absence of specific consent.

The United States system of organ procurement has gone through various modifications, but the outcome has been a failure to increase organ donations. Pennsylvania has attempted to remedy this by way of a 1994 law that reformed the state's organ-procurement system by enabling residents to indicate on their driver's licences that they would be willing to be organ donors. Hospitals were required to report all deaths to local organ-procurement organisations, so that families of suitable donors would be approached about organ donation. Since then organ donation has risen 40%. To further increase availability, it is proposed that the state will provide a \$300 "funeral benefit" to help defray the expenses of organ donors, the money to be paid direct to funeral homes. The law allows payments up to a maximum of \$3,000 per donor but the figure has been set at \$300 for a 3-year pilot programme.

⁴⁹ See Cal. Health and Safety Code @ 7150 (West Supp 1996) – table listing 18 jurisdictions that have adopted the amended UAGA.

⁵⁰ 42 U.S.C.S. @ 274 e (Supp 1994).

⁵¹ See *Brotherton v Cleveland* 923 F.2d 477 (6th cir, 1990) and *Whaley v Tuscola* 58 F.3d 1111 (6th Cir 1995).

⁵² U.S. Const. Amend. v, cl 4.

C Presumed Consent

Many European countries have adopted schemes under which consent is no longer required before body parts are removed.⁵³ In these systems it is presumed that the deceased has consented to the harvest of organs following death unless an objection to such a harvest was recorded. Argentina, Brazil and Chile have adopted such a system as well.⁵⁴ The effect has been to eliminate the need to carry donor cards. Many variations of the presumed consent system exist in Europe. Some countries inquire into the wishes of the surviving family.⁵⁵ Others have systems whereby organs are removed the moment a patient dies, if there is no known objection from the deceased to the harvest. Countries such as France and Belgium combine presumed consent with a practice of inquiring into the wishes of the next of kin. In contrast, in Austria organs may be taken unless the physicians are in possession of a declaration expressly refusing consent. There is no requirement to consult the next of kin and any objection must be in writing to be effective.⁵⁶ The physician has no duty to make a reasonable effort to find such writings, unlike France. Consequently Austria has a rate of procurement of cadaver kidneys twice that of the United States and most other European countries. However it has only slightly higher rates concerning livers and lower rates of heart donations.⁵⁷ Austria still has a shortage of organs even with a system of presumed consent.

Advantages of Presumed Consent

Countries such as France, Belgium and Austria, which have presumed consent systems, have higher procurement rates than countries such as New Zealand and Australia,⁵⁸ which have systems of encouraged voluntarism. One advantage of presumed consent is that there is no need to refer to drivers' licences or donor cards, which may not be carried at the relevant time. Another is that distraught family members do not need to make a positive decision to approve harvest. The patient has been able to record their objection, if any, during their lifetime, so the decision to do so will have rested with them and doctors are spared the difficult task of asking for consent. The decision whether or not to object was that of the patient made in a reasoned manner and cannot be overturned by family.

⁵³ Austria, Belgium, Finland, France, Greece, Italy, Norway, Spain and Sweden. See Monique Gorsline and Rachelle L. Johnson, "The United States System of Organ Donation, The International Solution and the Cadaver Organ Donor Act: And the Winner is..." 20 *Journal of Corporation Law* 5, 32 (1995).

⁵⁴ Ibid n45.

⁵⁵ Ibid n45.

⁵⁶ Federal Law of 1 June 1982 (Serial no 273) reprinted in *Legislative Responses to Organ Transplantation* 133 (World Health Organisation ed. 1994).

⁵⁷ Melissa N. Kurnit "Organ Donation in the United States: Can we learn from successes abroad?" 17 *Boston College International and Comparative Law Review* 405, 427 (1994).

Disadvantages of Presumed Consent

If presumed consent systems are applied strictly, this may result in distressing altercations between family and doctors. Consequently, in most jurisdictions family views are, in practice, respected. If the family is able to make a decision to refuse donation, this is likely to be equally as distressing as making a decision to donate. It is possible that only the more advantaged or educated groups in society would be aware of their right to opt-out and the less advantaged would take no steps, more through ignorance than through a willingness to donate.

If the autonomy of the donor is to be protected, a system must be available for recording objections to donation and that system must be able to be readily accessed by doctors. However if the wishes of the donor patient are able to prevail over any objections of the next of kin, this does increase the autonomy of the donor above the level presently applying in New Zealand, where objections of family are, in practice, always respected. Within one extended family there may be a divergence of views on organ donation. It is conceptually difficult to prioritise the value of views of various family members and other persons with close emotional ties to the donor.

People are suspicious of systems in which silence equates consent and see such systems as extending the power of the State. It is essential to respect cultural mores in order to avoid a loss of trust in the medical profession and also to preserve human rights.

STRATEGIES TO INCREASE THE SUPPLY OF ORGANS

A Nationalisation of Cadavers

It is possible for a State to legislate that all cadavers become the property of the State. Few countries have taken such an extreme step and in these countries substantial human rights violations have occurred, in particular, where States have removed the organs of criminals following execution.⁵⁹ China has allowed the harvest of organs from executed prisoners since 1984 and this practice harvests 2000 to 3000 organs per year⁶⁰. The potential for abuse and the abhorrence of the death penalty in countries such as Australia and New Zealand mean that taking organs from prisoners is unlikely to gain approval.

⁵⁸ International Donor Rates. http://www.donor.co.nz/facts_figures.html.

⁵⁹ See Christian Williams, "Combating the Problems of Human Rights Abuses and Inadequate Organ Supply Through Presumed Donative Consent", 26 *Case Western Reserve Journal of International Law* 315, 323 (1994).

⁶⁰ Allison Owen, "Death Row Inmates or Organ Donors: China's Source of Body Organs for Medical Transplantation", *Indiana International and Comparative Law Review* 495 (1995) at 496.

It is possible to limit the powers of the State to ownership of cadavers only where the patient has died naturally, but the demands for organs may lead to abuse. Generally, the donor's family has an emotional attachment to the donor and the involvement of family is an important safeguard to ensure that human rights violations do not occur. Nationalisation indicates a State with excessive power and as such the benefit of increased donation of organs is likely to be outweighed by the loss of autonomy within the community.

B Commercialisation

In most countries commercialisation, in which a market-based system of organ trade is permitted, is considered to be unethical. In the United States the sale of blood and sperm have been permitted, but not the sale of non-renewable body parts. In Australia there is generally a prohibition against trading in such tissue⁶¹, whereas in New Zealand there is no such specific prohibition on the sale of organs, although such a contract may be void as being contrary to public policy⁶². One method to increase donation would be to develop "some form of futures market in cadaver organs."⁶³

Futures Market

A futures market could provide that a payment was made to the donor now, in return for the right to remove their organs on death. The payment could be cash, lower health premiums or a payment to a charity. Alternatively, the payment could be to the donor's relatives, once the donor has died in a sufficiently healthy state for the organs to be useful, and after the relatives have given their consent. The payment could be in the form of a state-funded funeral benefit.

Issues that arise, include the status of such a contract and the contractual obligations should the organs not be used. The contract could specify the consequence if the reason for non-use was the poor condition of the organs because of actions of the donor such as smoking. However the organs may not be used for a variety of other reasons which are outside the control of the donor.

A system where the recipient of the organs pays the donor or the donor's family, leads to the suggestion of the poor being forced, through economic necessity, to donate organs to the more financially successful. It has been argued that this might increase the number of diseased organs being made available. The same concerns have been expressed about the sale of blood in the United States. This fear centres on the belief that the poor, and especially people who are

⁶¹ See Part IV Human Tissue Act 1985 (Tas), s27 Transplantation and Anatomy Ordinance 1978 (ACT), Human Tissue Transplant Act 1979 (NT), Transplantation and Anatomy Act 1979 (Qld), Human Tissue Act 1982 (Vic), Human Tissue Amendment Act 1987 (Vic), Human Tissue and Transplantation Amendment Act 1987 (WA), Human Tissue Act 1982 (NSW).

⁶² See n61 infra.

⁶³ P. Wilson, "Body Crime! Human Organ Procurement and Alternatives to the International Black Market" (1991) 30 *Trends and Issues in Crime and Criminal Justice* 61.

malnourished, alcoholics, or drug users might comprise the largest group of donors.⁶⁴ Such donors would have an incentive to misrepresent their medical condition.

If there were a market in organs for sale, then the availability of free donations would be likely to reduce, as people are less likely to donate freely an item for which payment is available. The counter to the intuitive distaste that many people experience when considering the sale of body parts, is the reality that where monetary value is placed on an organ, the available supply will increase. In such a case suppliers of poor quality organs will not be competitive in the market. Generally, testing should determine any defective organs to ensure that these are not transplanted into the unwary. Any commercialisation would need to be strictly regulated to avoid the development of a “black market” dealing in organs obtained inappropriately.

Living Donors

The increasing waiting lists for donated organs have led to pressure to increase the supply of organs, both from cadaveric donors and from living donors. A response to this pressure has been the improvement of programmes to identify potential cadaveric donors and to solicit permission from family members. Systems that apply the principle of presumed consent are more controversial, whereby persons are presumed to approve use of their organs after death unless they have expressly prohibited it.

An alternative approach is to encourage donation of renewable or paired organs from living donors. In the United States, increasing numbers of persons are donating kidneys to their spouses. Despite greater histo-incompatibility, the survival rate of these kidneys is higher than that of cadaveric kidneys.⁶⁵ In the United States, some transplantation programmes have recently begun to accept organs from donors with neither genetic nor emotional ties to the recipients. One such programme is at the University of Minnesota.⁶⁶

In a recent survey, one in four Americans said they would consider donating a kidney or a part of another organ to a stranger.⁶⁷ Transplantation from living donors raises ethical questions. One is that if the donor and recipient are related, by way of family or emotional ties, the donor’s decision may not be truly voluntary. Further, the donors are subjected to surgery that is not performed to treat an illness and has definite rates of mortality and morbidity. The medical profession has suggested that the use of organs from living donors is justified by the psychological benefit to the

⁶⁴ Brams, “Transplantable Human Organs: Should their sale be authorised by State Statutes?” 3 *American Journal of Law and Medicine* 183, 192 (1977).

⁶⁵ The 3 year survival rates were 85% for kidneys from 368 spouses, 81% for kidneys from 129 living unrelated donors who were not married to the recipients, 82% for kidneys from 3,368 patients and 70% for 43,341 cadaveric kidneys. See Paul Teraski, J Michael Cecka, David Gertson, and Steven Takemoto, “High Survival Rates of Kidney Transplants from Spouse and Living Unrelated Donors,” 333 *New England Journal of Medicine* (1995) 333-336.

⁶⁶ See Teraski et al *ibid* n57.

⁶⁷ National Kidney Foundation press release, 22 June 2000.

donor, who experiences the altruistic satisfaction of having assumed a risk in order to help another person. However, concerns have been expressed about the health problems that may be experienced by donors as they age.⁶⁸

In the case of non-related donors, strong arguments can be made in favour of some form of financial compensation, even if the predominant motivation is altruism. There are public policy reasons for encouraging such donations, in that the recipients, who no longer need treatment such as dialysis, will save public health funds and free resources for others. Donors are likely to incur financial losses, in that they may be unable to work and may need domestic assistance during the period of recovery. An argument can be made that to compensate a donor for such expenses is not payment per se and can be justified on the grounds of public benefit. It is debatable whether this would lead to a movement towards outright payment.

CONTRACT

Putting aside issues of medical ethics that may arise, there are several possible types of contract to sell body parts. They include:

1. A living person selling an organ such as a kidney, or
2. A living person entering into an arrangement whereby in return for the benefits now or in the future, they will consent to the harvest of some or all body parts after death, or
3. The person lawfully in possession of a deceased cadaver selling body parts.

Historically, judges have refused to tolerate any contract that they considered injurious to society and “against the public good”.⁶⁹ A contract which is against public policy and violated by some improper element may be illegal or void. However, public policy is now categorised under distinct heads, such as contracts promoting sexual immorality, which do not seem relevant in this context. There is controversy over whether the courts still retain the freedom to recognise new heads of public policy. The most likely view is that in exceptional circumstances they would be willing to do so, working from the broad general principles or by expanding a basic category.⁷⁰

One head of illegality is that a contract is illegal if the object of the contract is the commission of a crime or a tort. The general rule is that the courts will not allow a party to claim benefits from crime.⁷¹ Thus, if a person cannot legally consent to an operation to remove and sell a kidney, then a crime such as battery will have been committed and any contract will be illegal.

⁶⁸ Norman Levinski, “Organs Donation by Unrelated Donors”, 343 *New England Journal of Medicine* (2000) 430-432.

⁶⁹ *Collins v Bantern* (1767) 2 Wils KB 341 at 350 per Wilmot C.J.

⁷⁰ See Diana Brahams, “Kidneys for Sale” (1989) 139 *New Law Journal*, 159, 160.

⁷¹ *Beresford v Royal Insurance Co Ltd*, [1938] AC 586.

Should a contract to sell body parts entered into by live donors be held to be against public policy and illegal it would be unenforceable, as would also be any ancillary contracts that arise. Doctors, hospitals and the like would not be able to sue for fees or charges. Money paid in advance would not be recoverable and neither would the recipient be able to sue if the organ proved defective, or the donor made a better contract with another recipient. The donor could not sue the health carers in contract, although there might be potential liability in tort.

The fundamental problem with contracts relating to cadaveric organs is that although the executor may have the lawful right to possession of a corpse, this is only for limited purposes, such as interment. The executor does not have property in a corpse sufficient to be able to sell the body parts. Equally, if a person makes an arrangement to be paid now in return for a future donation of their corpse, fundamental issues of property arise as the person arguably has restricted property rights over their body during life and none after death.

In conclusion, contracts to sell body parts entered into by live donors are potentially illegal, although the issue would have to be determined judicially. With respect to the sale of body parts from cadavers, it is only possible to make such a contract if the law develops to determine that some person has property in the corpse.

CONCLUSION

The issues raised in this paper may be repugnant to many people who would consider donation of body parts for reasons other than altruism to be fundamentally distasteful. However, as the demand increases and the supply of organs is insufficient, the development of black markets and even theft of organs is likely, if these issues are not addressed.

The rule that there cannot be property in a human body is outdated. Any change would be best made by way of legislation rather than judicial development as was suggested by Lord Justice Rose.⁷² Systems to increase the supply of organs either require an increase in the power of the State, as in presumed consent systems, or recognition of the right of an individual to claim and retain property in their own body. Increases in recognition of the rights to autonomy of the individual have been reflected in the requirement for informed consent to be given to medical treatment. Autonomy also justifies the concept that people should be able to make their own decisions about their body parts both before and after death. The rights of family, although important, should not be greater than the autonomy of the donor.

⁷² Ibid n32.

Recognition of property rights of an individual in their own body could allow the development of some system of commercialisation. The dangers of abuse of the unwary or otherwise disadvantaged are so great that Parliament should regulate and control any developments. Any legislative intervention should provide for appropriate counselling of donors and the provision of benefits by the State, rather than payment by the recipient of the organ. This would reduce the likelihood of the financially successful being able to take advantage of vulnerable groups in Society. The financial outlay required could be justified by quantifying the benefit to the State of the recipient no longer requiring high levels of on-going medical care and becoming productive members of society. Commercialisation by permitting direct contractual arrangements between donor and recipient has greater potential for abuse and might lead to disputes about the nature of the agreement. They also suggest a situation where ultimately only the advantaged could afford a transplant.

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