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New Issues in Organ Donation

by

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1. New Issues

The purpose of this paper is to identify some new issues in relation to organ donation and some arguments for alternative views on each issue. The parameters for what constitutes a new issue are:

- a) Changes to technology that affect the assumptions on which the resolution of issues has been based;
- b) Indications that there may be a shift in what is considered to be good medical practice and in the values being espoused by health professionals;
- c) New or different challenges to the values that have been accepted as good practice.

In the use of cadaveric organs and tissue there seem to be several new issues:

- a) Registering consent rather than intent
- b) Donation after controlled death
- c) Differing standards over what is meant by "Brain Death"
- d) Use of less than suitable organs
- e) The role of the Designated Officer
- f) Justice and organ allocation
- g) Mutual consent to donor family-recipient contact
- h) Information, consent and disclosure of material factors that indicate donor identity.

In the use of organs and tissues from living donors the following issues are of new or renewed interest:

- a) Bodily integrity and "donation" by children and other dependant persons;
- b) Donors of greater health risk;
- c) Partial liver and lung lobe donation;
- d) Donation of less than ideal organs;
- e) Assessment of unrelated living donors;
- f) Paired and remunerated living donation;
- g) Information, consent and disclosure of material factors; that indicate donor identity;
- h) Internet canvassing for organs – privacy, exploitation and justice issues.

2. Issues in Deceased Organ Donation

2.1 The National Organ Donation Consent Register

The recent establishment, by the Australian Health Ministers, of a new national organ donation consent register is a shift from what was an expression of one's wishes indicating intent, to a registered consent that is legally sufficient to permit the removal of organs after death. This raises questions about whether such a consent overrides the objections of family members after death has occurred.

An argument against allowing families to override registered consent by the deceased is that it is a matter of respect for autonomy that the deceased's wishes be respected and the consent register will improve the organ donation rate.

The arguments for allowing family members to override include the fact that it is accepted medical practice to respect the grieving process and not to antagonize families at that time. The donor is dead and it is the living who become the primary concern of the intensive care unit. It is in fact the living who make sacrifices in relation to allowing organ donation, foregoing the ordinary process of being with the relative during the normal process of death and coping with trying to understand brain death.

2.2 Donation after cardiac death¹

The "Maastricht" categories for non-heart-beating donors², now termed "donation after cardiac death" (DCD) donors, have been developed as a way to divide potential donors on a clinical basis and are widely accepted internationally.

Category I: Dead on scene (out of hospital) – Unknown warm ischaemic time: “Uncontrolled”

Category II: Unsuccessful resuscitation– Known warm ischaemic time: “Uncontrolled”

Category III: Waiting cardiac death after planned treatment withdrawal – Known and limited warm ischaemic time: “Controlled”

Category IV: Cardiac arrest after confirmation of brain death but before planned organ procurement – Known and potentially limited warm ischaemic time: “Uncontrolled”

In category II uncontrolled donors, the donor may die and the transplant team arrive before the donor's next of kin can be contacted. It is controversial whether cannulation and perfusion can be started in these circumstances. On one hand, it can be considered a violation of the potential donor's autonomy to cannulate before their in-life wishes are known. On the other hand, delay in cannulation may mean that a patient's strongly-held wish to be a donor cannot be respected.

Some hold the view that a doctor's duty of care to the still-living outweighs any duty of care to the dead. A compromise that may be reached is to cannulate if there is any evidence of a wish to donate (such as a donor card or registration as a donor) even in the absence of next-of-kin.

There have been new developments of organ procurement following death from cessation of circulation in controlled circumstances (Category III). The timing of the death is planned, in a sense, as it happens as a result of deliberate withdrawal of ventilation. The decision to withdraw treatment is made, presumably on justifiable grounds such as that the ventilation is intrusive and may be considered overly burdensome when there is little or no prospect of recovery.

The issues that then arise include how much time must elapse after the heart stops beating before efforts may be made to recover organs and tissue, and whether procedures done for the purpose of preserving organs may begin before death has been determined. The proposals are to institute pharmaceutical therapy such as anti-coagulants and to undertake surgery to place large catheters in the femoral arteries to facilitate cold perfusion of organs after death. Such procedures done on persons who are still alive are not therapeutic for them, and the question arises as to whether anyone has the authority to consent to non-therapeutic procedures on the patient's behalf. It is assumed that the patient could consent to the procedures, if able to do so, as an act of altruism. However, provision of medical interventions, without the specific consent of the person, is not lawful in most jurisdictions where those interventions are not being used to save that person's life, prevent serious damage to their health, or alleviate significant pain or suffering.

Arguments against ante-mortem procedures to facilitate organ preservation in the absence of a specific expression of consent by the patient include the view that consent to organ donation presumes that death will have occurred and the literature up until now has tended to be reassuring in that respect. Consent to donation after death cannot be presumed to be consent to procedures done prior to death. Second, the next of kin or other representatives do not have the legal authority, in most jurisdictions, to consent to non-therapeutic procedures. There is also concern that the issue may confuse the already vexed issue of donation after death by the brain criterion.

Arguments for ante-mortem procedures include the view that if the patient wanted to be a donor, then it is in his or her interests for the procedures to be done in order to facilitate donation. The procedures increase the availability and the quality of the organs able to be obtained. Thus arguably given that he or she wanted to be a donor, he or she would have wanted ante-mortem procedures to be done to facilitate that donation.

There is an issue in this over what it means for something to be in someone's best interests. Is the phrase "best interests" synonymous with "preferred would or would have been preferred" or does the phrase have meaning in terms some sense of being objectively related to that person's well-being, etc. There does seem to be a sense in which I can prefer that which is not in my best interests. That is implied in the phrase "altruistic preference."

The manner in which death is to be diagnosed after withdrawal of ventilation and cessation of circulation is also problematic. The legal definition generally covers the two possibilities of irreversible cessation of all function of the brain or irreversible cessation of circulation. There is a move in some protocols to use the phrase "permanent cessation of circulation," which has a slightly different meaning. Having decided not to restore ventilation and not to attempt resuscitation, cessation of circulation may indeed be permanent, but not irreversible. Is not being able to be resuscitated a criterion for determining death by the circulation criterion, or has death occurred simply when circulation has ceased?

Obviously the timing is crucial, if one must wait until irreversibility, then one will presumably have lost the use of a viable heart for transplantation, and may have lost other organs that are sensitive to warm ischaemia, such as the liver or the insulin producing islets from the pancreas.

A solution may be to insist that sufficient time has elapsed for a determination to be made that irreversible cessation of brain function has occurred. There are considerable arguments amongst clinicians about what constitutes sufficient time and the protocols differ from one place to another.

My view is that in the interests of community understanding and acceptance of deceased organ donation, there should be no moderation of the current definition of death and that the notion of irreversibility should be retained.

A possible interpretation of irreversibility in this context is to say that the cessation of circulation is irreversible unless overly burdensome and unwelcome interventions are re-established. This would allow the diagnosis of death even though "death" is not strictly irreversible.

2.3 Differing standards over what is meant by "Brain Death"

There are challenges to the consensus in relation to the determination of death by the cessation of brain function criterion. The challenges are numerous and from both directions. Some are arguing for a more relaxed standard than cessation of all function of the brain, and there are indications of some medical acceptance of the view that brain death can be determined even though some brain functions continue. This is the position that is now held by the Australia and New Zealand Intensive Care Society and may be regarded as the new orthodoxy. At the other extreme some are arguing that the original consensus was mistaken and that a person remains integrated and alive, even though brain function has ceased.

Death of a human being is the end of the life of that being. Historically that was associated with the permanent cessation of respiration and circulation. When that happened the breakdown of the body, putrefaction, began soon after. Theologically (across religions and cultures) it was thought that that breakdown of the body indicated that the life force or soul had gone. The link between cessation of cardiac and respiratory function and inevitable putrefaction allowed death to be diagnosed by cardiac and respiratory failure. In Christian practice it was still possible to administer the sacraments (which can only be administered to the living) until putrefaction, even if respiration and circulation had ceased.

The Advent of Brain Death

In modern times, ventilators permitted respiration without brain stem function and thus interrupted what would have been a progression from death of the brain stem to cessation of respiration, cessation of cardiac function and then death of the tissue generally (putrefaction). This challenged traditional notions of death and gave rise to the notion of determining death by the cessation of all brain function, or "brain death". This was the standard medical view for which medical criteria were devised in the 1970s known as the Harvard criteria and accepted by the US President's Commission in 1981³ and by the Royal Colleges of Medicine in the UK.

Recent Bioethical Discussion

More recently, there has been some acceptance that death has occurred when there is permanent loss of consciousness and loss of the capacity for spontaneous respiration. By these criteria, "brain death" may be diagnosed even though some functions of the brain (other than consciousness) may be retained. Some bioethicists argue for a permanent loss of consciousness definition.

Causes of Community Confusion

In the community there is some confusion over the terminology. "Brain dead" is a term that may be applied in the technical sense of permanent cessation of all function of the brain, but it may also be applied to a person in permanent or persistent coma, to a person in a state of post coma unresponsiveness, to a person in a state of minimal consciousness, and, perhaps not entirely seriously, to someone with a bad hangover.

Mainstream Acceptance

Underlying these cultural differences within Australia would seem to be several distinct notions about the significance of life, and hence of the meaning of death. For some, the differences reflect a different understanding of the ontology of a human being. That is to say, for some a human being is only human to the extent that he or she continues to have the particularly human capacity for rational autonomy. For others, a human being is a member of the human family whatever his or her capacities. The former are likely to accept permanent loss of consciousness as death. The latter tend to focus on the reality of the being continuing to live as an integrated body. This latter view seems to have been the mainstream view that saw the permanent cessation of all function of the brain adopted as the legal definition and distinguished this state from a state of permanent coma and from a state of post coma unresponsiveness. The acceptance of the diagnosis of death by the *permanent loss of all brain function* criterion seems to have been based on the view that some brain function is necessary to maintain the integration of the functions of the various parts or organs of the body. There is another group who take a similar integrationist view to the mainstream, but argue that there remains sufficient integration of the body in a person with cardiac and supported respiratory function, even after the brain has ceased all function.

Brain Death and Religion

Mainstream religious views generally accept the integrationist view, seeing the human person as an embodied spirit. Loss of integration can be accepted as reflecting a loss of the presence of a soul. The permanent loss

of consciousness view is more likely to be adopted by those who take a non-religious or materialist view of the human being.

Currently most of the Christian Churches have expressed an acceptance of death according to the *loss of all function of the brain* criterion. The notion that death may be diagnosed by a state of permanent loss of consciousness while some brain function is retained does not seem to have been addressed by the Christian Churches in any authoritative way.

In 1985 the Islamic Organisation for Medical Sciences, meeting in Kuwait, endorsed adopted brain death using the Harvard criteria for determining that death of all functions of the brain had occurred. The Congress of Islamic Jurisprudence subsequently reviewed this favorably in 1986.⁴

Judaism prohibits deriving benefit from mutilating or delaying the burial of a corpse but this prohibition can be overridden to save a life. This is variously interpreted in relation to diagnosing death and obtaining organs for transplant.

Shintoism opposes the concept of brain death. Hinduism does not have a formal structure of guidelines or edicts with respect to such issues. As far as it is possible to ascertain their views on the matter, Hindu and Vedic scholars accept the concept of brain death. The concept of giving or *daan* is ingrained in Hindu thought.⁵

The immediate problem seems to be that the clinical criteria that have become the medically accepted standard for determining death do not exclude the possibility of what Veatch refers to as lingering integrative brain functions.⁶ These include the functions of the hypothalamic-pituitary axis in the mid-brain that continue to bring about control of various organs, and various other functions of the lower brain.

A response made to defend the clinical criteria for whole brain is often to distinguish functions of the brain thought to be unimportant or insignificant. This is the approach taken by the Australia and New Zealand Intensive Care Society.⁷ A problem is that the criteria thus no longer match the legal definition which depends on irreversible cessation of all functions of the brain.

ANZICS also adopts a different definition of death than the legal standard, stating

The term "brain death" should be used when death is certified using the brain function criteria. Brain death is established by the documentation of irreversible coma and irreversible loss of brain stem reflex responses and respiratory centre function or by the demonstration of the cessation of intracranial blood flow. (p. 7)

The current situation thus would seem to be open to legal challenge. The danger that I perceive is that the making of distinctions between important and unimportant brain functions is to some extent subjective and perhaps arbitrary and it is also becoming less and less distinguishable from the notion that death is simply a state of irreversible loss of consciousness. This view is problematic for two reasons:

- a) There are some philosophical and theological leaps to be made if one is to make human life synonymous with mental functioning including an acceptance of either materialism or dualism. The implication for us would seem to be a rejection of the Council of Vienne that adopted the Boethius/Aquinas notion of the unity that is the human person.
- b) Irreversible loss of consciousness is not a diagnosable state. Consciousness is an inference we draw from a person's behavior. Loss of consciousness is not an observable or measurable phenomenon.

The approach I have advocated is that we should retain the definition of death as the loss of *all* functions of the brain and that that agreed definition be properly applied. The clinical tests are thus just a part of the process to confirm that the loss of brain function does indeed extend to the lower brain. The clinical criteria ought not, on their own, be taken as determinative of death. They are tests only for some of the lower brain functions and not tests for brain function generally nor even for all lower brain functions. It is my understanding that it is the practice of cautious physicians not to depend on the clinical criteria alone but rather to depend on their knowledge of the nature of the injury and the processes by which destruction of the brain may occur and on the basis of a judgment, often supported by ancillary testing, to reach a conclusion that cessation of all brain function has occurred, before instituting the confirmatory routine of the specified clinical tests.

This is consistent with the view taken by Pope John Paul II⁸:

It is a well-known fact that for some time certain scientific approaches to ascertaining death have shifted the emphasis from the traditional cardio-respiratory signs to the so-called "neurological" criterion. Specifically, this consists in establishing, according to clearly determined parameters commonly held by the international scientific community, the complete and irreversible cessation of all brain activity (in the cerebrum, cerebellum and

brain stem). This is then considered the sign that the individual organism has lost its integrative capacity.

With regard to the parameters used today for ascertaining death – whether the “encephalic” signs or the more traditional cardio-respiratory signs – the Church does not make technical decisions. She limits herself to the Gospel duty of comparing the data offered by medical science with the Christian understanding of the unity of the person, bringing out the similarities and the possible conflicts capable of endangering respect for human dignity.

Different Approaches to Brain Death:

Disaggregators

Death is a process not a single event and it is a question of when changes in behavior are permitted, not death event (Peter Singer)

Integrationists

1. **Loss of all brain function** (Harvard, President's Commission, Royal Colleges, Human Tissue Acts)
2. **Somaticists** – no integration at organ level (Alan Shewmon)

Mentalists or mental integrationists

Permanent lost consciousness or irreversible coma (sometimes coupled with loss of spontaneous respiration) – ANZICS, Robert Veatch?

Ethical Issues in Explaining Brain Death

When discussing brain death, health professionals need to bear in mind that the understanding that a person has may simply lack information about the medical reality that has occurred when the brain is destroyed, but there may also be cultural differences that lead to different levels of acceptance of the concept of determining death by the brain function criterion. Those differences may be particularly confusing if there are different uses of the terminology amongst health professionals.

In principle, health professionals should only apply the term “brain death” to those circumstances in which it has been determined, by those who are qualified to make the diagnosis, that there is permanent cessation of *all* function of the brain. They should take great care to distinguish this state from those various states in which there is severe brain damage, and even permanent loss of consciousness, but some continuing brain functions.

In the process of dealing with informing a family of the diagnosis of brain death, it is reasonable that members of the family have the opportunity to see one of the testing processes taking place.

The practice, sometimes employed, of ancillary testing to produce evidence of lack of blood circulation to the brain, such as an ultrasound image or an X-Ray image using contrast medium, may greatly benefit the process both at the time and subsequently when the trauma of events and later grieving may otherwise affect understanding and acceptance.

2.4 Use of less than suitable organs

There is a growing tendency to use organs that would once have been considered not suitable for use. This is partly due to changes in the ability to control rejection and partly due to demand for organs and confidence in the outcomes.

This does raise justice questions about who gets the better or the less than ideal organs. It also raises questions about whether the patient is informed about the quality of the organ being provided.

There are also attempts to match features so that an older person is more likely to be given an organ from an older donor, a person who is already tested positive for a transmissible disease may be given an organ from a person with the same disease.

These matters raise questions for the organ allocation algorithms as well as the overall safety of organ transplantation.

2.5 Justice and organ allocation

The differing approaches to the allocation of organs and the weight given to the factors involved in the algorithm raise justice considerations and questions to do with equal access to health care and on what basis one might discriminate.

The key principle underpinning the allocation process is that there should be no discrimination between potential recipients on the basis of:

- a) race, nationality, religious belief, gender, marital status, sexual orientation, logistics, social status, disability or age (except where conditions associated with the patient's age directly determine the likelihood of a poorer outcome);
- b) linkage with willingness of family to be donors (after death);
- c) the patient's need for a transplant arising from past behavior;
- d) capacity to pay; or
- e) willingness to participate in experimentation, except where it is a trial for a novel transplant procedure that requires follow-up and audit.

Allocation of organs is a complex process that depends on a range of factors besides medical need and capacity to benefit. There is an unpredictable element in the process in that organs have to be matched to recipients. This means that potential recipients may remain on waiting lists for variable periods of time unrelated to their medical need, but dependent upon a matched organ becoming available.

Transplant units should use organs as best they can, and balance medical need with likelihood of successful transplantation. It is legitimate that the following criteria be taken into account in considering potential recipients:

- a) length of time waiting for a transplant, taken from the time that illness progressed to a point that a transplant would be of immediate benefit;
- b) important medical factors, such as the closeness of tissue-matching and matching of organ quality with the patient's medical status to maximize the likelihood of success;
- c) the urgency of a transplant given the likely rate of degeneration of health without transplant therapy, especially if patient survival is immediately threatened by that degeneration;
- d) need in terms of how sick the patient is without transplant therapy, and the prospects for
- e) transplant therapy producing a better outcome;
- t) logistic factors in making the transplant available to the recipient within the time frame;
- g) whether the patient has dependents; and
- h) whether the patient is reasonably likely (with or without assistance) to comply with the treatment regime necessary to secure graft survival.

2.6 The role of the designated officer

Different practices and greater sophistication between hospitals in the various roles of the Designated Officer who carries the responsibility for approving the procurement process in an institution, the transplant coordinator and the donor coordinator have emerged.

In the various jurisdictions, designated officers have a role of oversight of the organ procurement process. The task is, in reality, one of ensuring that each of the necessary steps has been properly documented in relation to the determination of death, the separation of clinical roles and the obtaining of consent. The role is even more crucial in the circumstances of donation after cardiac death in controlled circumstances.

Some hospitals retain this as a role for a senior medical administrator who has been adequately trained in the ethical, legal and medical issues

involved. Some delegate the role to the medical staff in the intensive care unit, including relatively junior staff.

The arguments for delegation to juniors concern the need for someone to be available at odd times and urgently.

The arguments against delegation to juniors concerns the fact that this is an oversight role and involves the officer ensuring compliance with the ethical, legal and medical standards. It is thought that such a person needs to have the authority to provide that oversight and that may be difficult for a relatively junior person.

There are also numerous issues to do with the timing of approaches to families for donation and who should make that approach. There are two schools of thought as to whether those who are caring for the donor should be the first to broach the question, given that the matter of donation potentiality could be seen to compromise care of the patient. On the other hand they have an established relationship with the family. There are also questions as to when the donor coordinators become involved, whether before or after the information is given and consent obtained.

2.7 Mutual consent to donor family-recipient contact

The procurement of organs from deceased persons has developed as an anonymous process to protect recipients and donor families from unwarranted intrusion into their privacy.

A negative aspect of that is that rather than *giving and receiving*, with all its humanness, the anonymity has meant that the process, for the participants, has been more like *taking and getting* organs.

Also confusing the matter is that without that information recipients may fantasize about the nature of the person from whom the organ came including race, gender, etc. Donor families may envisage that the personality of the donor somehow continues in the recipients and that may complicate grieving. Donor hearts and eyes seem to be significant subjects of fantasy in that respect.

In recent years efforts have been made by the donor and transplant co-ordinators to facilitate the exchange of non-identifying information by way of recipients sending anonymous letters of thanks to donor families and reports being given of how well recipients are doing.

However there are people who would like to have more personal contact. The latter does however raise the question of the possibility of inappropriate contact and even possessiveness between grieving donor family and recipients.

The suggestion has been that there be the possibility of a managed process with mutual consent and access to counseling, much as there is now with adoptee and relinquishing parent contact.

Complicating all this is the fact that it is not difficult for identification of donors to be made via death notices and coupling the day of death and death notice information with other information that may be available that would otherwise have been non-identifying. There may also be news reports relating to a sudden death which allow linkage to be made.

Health professionals are bound by confidentiality on this matter, and they can find themselves unable to provide the counseling and other support that may be required once identification is made by the parties.

An argument for a mutual consent register is that it would allow a well-conducted process to be established.

2.8 Information, consent and disclosure of material factors that indicate donor identity

Information about a donor's age and state of health, other physical attributes and manner of death may affect the quality of the organs available for transplantation. That information would seem to be material to the decision made by a recipient to accept or reject the offer of an organ for transplant.

The provision of that information however does increase the probability that the recipient could identify the donor. There is thus a potential conflict between the duty of disclosure and the right to privacy and the legal requirement of confidentiality. The question arises as to whether it may be demanded that the recipient waive the right to receive that material information as a condition of being on the list for transplantation.

3. Issues in Living Donation

3.1 Bodily integrity and "donation" by children and other dependant persons

There is a growing incidence of living related donation of organs or tissue by children and by others in dependant relationships, such as adults with cognitive impairment. This raises questions about a right to bodily integrity, conflicts of interests for parents and guardians making decisions for one family member to donate to another, and whether there is a need for an independent determination that organ or tissue donation is in the donor's best interests.

Donation by children is ethically complex. They will often be sought as a donor to a sister or brother, particularly for bone marrow donation. It is difficult and, in cases of very young children, impossible to ensure that children have a full understanding of what is involved. Because of their immaturity and dependence, children are very vulnerable and great care must be taken to protect their interests. For these reasons, donation by

children should only occur in circumstances in which it is thought the donation is in that child's best interests.

Where parents make the decision, they will face the issue of whether it is appropriate at all to subject one child to intrusive procedures and risks for the sake of another. There is at stake a fundamental issue of respect for the bodily integrity of a child. It ought not be the case that a living child's body or body parts are seen as a mere resource for another child. Irrespective of the needs of another, each child has a right to bodily integrity and thus not to be invaded.

However, the death of a sister or brother may be such a serious threat to the well-being of a potential donor that their overall interests would be more damaged by their sibling's death than by the discomforts of, say, a bone marrow transplant. In that case becoming a donor may be in the donor child's best interests and thus consistent with respect for the integrity of that child.

As a child matures, he or she will be able to have a better understanding of such matters and a clearer appreciation of the significance of his or her own decisions. Hence, although legally still a minor, an older child may in practice take a more active part in such decision-making than a younger child.

Some people see the family as an intimate group in which the interests of one member are strongly linked to the interests of all: they argue that the good of the family as a whole is more important than the interests of only one member. But this argument and the balancing of interests within a family must occur within limits and one of those limits is respect for bodily integrity.

Decisions to permit a child to be a living donor will only be ethically acceptable where:

- a) the risks to the child donor are minimal;
- b) the donation is to a person – such as a sibling – with whom the child has an intimate relationship;
- c) the donation is a last resort in treatment for the recipient;
- d) the proposed transplant is of proven efficacy and such expected benefit to the recipient, and thus indirectly to his or her sibling, and the risks and discomforts for the donor child so minimal, that an independent judgment is made that donating the organ or tissue on behalf of the donor child is in his or her best interests;
- e) the parents consent and the child (if she or he is able to do so) agrees or assents – the child's understanding of the donation and transplantation may be incomplete, but efforts must be made to ensure that his or her understanding is as thorough as possible, consistent with his or her age; and

f) where required by law, a court or tribunal authorization has been obtained to undertake a non-therapeutic procedure on a child on the basis that the procedure is in that child's interests.

The same issues may arise for decisions to take organs from adult persons with cognitive impairment and in dependant relationships.

3.2 Donors of greater health risk

There is a trend toward accepting donors who have health assessments that indicate increased risks to them following donation, for instance, conditions such as raised sugar levels or hypertension or a family history of disease or genetic predisposition that indicate a greater risk to them of loss of function following donation.

The trend occurs in both related and unrelated donation. A well-motivated person may be prepared to donate despite the risks, especially in the circumstances of a close relative in need.

There may also be circumstances in which a donor may be prepared to lose a function for the sake of a recipient. The latter may be particularly the case for a parent donating to a child or between spouses.

The question arises as to whether there are professional ethical limits to donation beyond the requirement that the donor has made a free and informed choice. The traditional principle has been that a medical professional should first do no harm (*primum non nocere*).

Some organs, such as a partial liver (especially the right lobe) or the lobe of a lung may involve greater risk to the donor than has customarily been considered to be medically acceptable. One could also envisage a person donating a cornea and thus losing the function of binocular vision.

Arguments for allowing significant harm or risk to donors may be:

- a) A simple risk-benefit analysis in which one simply aggregates risk and benefit to the parties involved and calculates an overall benefit may be offered as justification on the grounds of utility.
- b) The self-identification of a person's interests with those of his or her child, or with a spouse or partner, may also be offered as justification for a likely significant harm or risk to the donor, which would otherwise be considered unacceptable.

An argument against allowing significant harm or risk to donors issue is the fact that transplantation involves a team of health professionals having professional obligations to the donor and to the community to practice medicine in a way that preserves personal and bodily integrity. Consent is a necessary but not a sufficient condition for medical

intervention, Medicine has its own standards of what may be considered professionally acceptable conduct.

The taking of regenerative tissue or the taking of a kidney when a person is well and would retain adequate renal function through the remaining kidney have been considered satisfactory because the risk of long term harm is minimal and because the removal involved no loss of functional integrity.

Arguably left lobe liver (mortality rate of around 1:500) or lung lobe donation are in this category, though the risks of left liver lobe removal are relatively high and the removal of a lung lobe does diminish lung capacity and hence some function as well as being otherwise risky.

There may be a distinction between losing functions altogether and merely diminishing functions that may be applied to lung lobe removal.

This prompts questions such as whether it would be legitimate for a spouse to donate a hand to a partner who had lost both hands? They would then both have one hand and that may be better for them as a couple on utilitarian grounds, but would that loss of function be an acceptable outcome from the perspective of it being deliberately caused by surgical intervention?

Consent of the victim is not a defense to causing grievous bodily harm. The presumption in organ donation has been that the donor is left functionally intact. The 2001 Catholic Health Australia *Code of Ethical Standards*⁹ (n. 3.18), following in the Catholic Tradition expresses it:

Donation of non-regenerative tissue is only permissible when this will not impair function, be detrimental to the discharge of the donor's responsibilities, or involve serious danger to the donor's life, future health or identity.

A violent husband may still be prosecuted even if his wife returns to him and to the abusive relationship and she refuses to assist prosecution. Blood sports are, by and large, prohibited even between consenting adults. (Note that boxing is an exception but is meant to be regulated and to be undertaken wearing gloves that minimize harm and to be refereed such that fights are stopped when someone is badly hurt).

In those terms taking an organ from a loving, consenting donor does raise a question as to whether that is permissible when the removal would cause loss of function or grave risk to health or life.

3.3 Paired and remunerated living donation

Paired and remunerated living "donation". Paired donation occurs when a family member wants to donate but there is not compatibility, so instead they donate the organ to others in exchange for a compatible donor being found for their relative. That raises an issue as to whether that

constitutes trade in human organs. There is pressure for governments to provide financial compensation to living donors for time lost from work and other financial costs to them. It is suggested that a distinction may be made between financial compensation in that respect and paying them for the organ or tissue.

The CHA Code of Ethical Standards (n. 3.16) expresses it thus:

Parts of the human body are not to be treated as commodities. Trade in human body parts is unacceptable, as is any other disrespectful use of the organs or tissues of a living or deceased person.

In principle, a person offering an organ in exchange for a relative receiving a compatible organ from someone else is a trade in a human body part. Is it somehow different and ought it to be allowed or facilitated by establishing a register for such exchanges to occur?

3.4 Internet canvassing for organs – privacy, exploitation and justice issues

The use of the internet to canvas donation of an organ from unrelated living donors has resulted in an inability of the medical teams to protect anonymity and prevent exploitation of one party by another. The justice issues involved in some patients being better placed to secure a donor than others and the inequalities of access thus generated. It is also difficult when there are prior arrangements between donors and recipients to prevent persons asking for or accepting payment for their organs.

References

1. J. Cooper, T. Chin, N. Krieger, L. Fernandez, D. Foley, Y. Becker, J. Odorico, S. Knechtle, M. Kalayoglu, H. Sollinger, A. D'Alessandro, "Donation After Cardiac Death: The University of Wisconsin Experience With Renal Transplantation," *American Journal of Transplantation* 2004; 4: 1490-1494.
- G. Koostra, "The Asystolic, or Non-HeartBeating Donor," *Transplantation* 1997; 63:917-21.
- "Categories of Non-Heart-beating Donors," *Transplantation Proceedings* 1995; 27: 2893.
- S. Sudhindran, G. Pettigrew, A. Drain, M. Shetri, C.J. Watson, N.Y. Jamieson, J.A. Bradley, "Outcome of Transplantation Using Kidneys From Controlled (Maastricht Category 3) Non-Heart Beating Donors" *Clinical Trans-plantation* 2003; 17:93-100.

- M. Weber, D. Daniel, N. Demartines, P. Ambuhl, P-A Clavien, "Kidney Transplantation From Donors Without A Heart Beat," *New England Journal of Medicine* 2002; 347: 248-255.
- P. Abt, M. Crawford, N. Desai, J. Markmann, K. Olthoff, A. Shaked, "Transplantation From Non-Heart Beating Donors: An Increased Incidence of Biliary Complications," *Transplantation* 2003; 76: 1714-1719.
- S. Steen, T. Sjoberg, L. Pierre, Q. Liao, L. Eriksson, L. Algotsson, "Transplantation of Lungs From A Non-Heart Beating Donor," *Lancet* 2001; 357 (9529) 925.
2. G. Koostra, "The Asystolic, or Non-HeartBeating Donor," *Transplantation* 1997; 63:917-21
3. "Guidelines for the Determination of Death," Report of the medical consultants on the diagnosis of death to the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, *JAMA*, 246, 1981.
4. G.K. Pande, P.K. Patnaik, S. Gupta, P. Sahni, "Brain Death and Organ Transplantation in India," *National Medical Journal of India*, New Delhi. 1990.
5. Sanjay Nagral "Ethics of Organ Transplantation" *Indian Journal of Medical Ethics*, Volume 3 Number 2, April- June 1995.
6. Robert M. Veatch "The Death of Whole Brain Death: The Plague of the Dissaggregatirs, Somaticists, and Mentalists," *Journal of Philosophy and Medicine* 30: 353-378, 200
7. Australian and New Zealand Intensive Care Society, *Recommendations on Brain Death and Organ Donation*, Second Edition 1998
8. Address of John Paul II to the 18th International Congress of the Transplantation Society, Tuesday 29 August 2000
9. <http://www.cha.org.au/site.php?id=407>