

Preface

This book presents the proceedings of the first international congress of the German Academy of Transplantation Medicine on “Ethics in Organ Transplantation”, which took place in Munich, Germany, December 10 – 13, 2002 with about 300 participants from 37 countries. It follows a very successful congress entitled *Organ Replacement Therapy: Ethics, Justice and Commerce* that was organized by Walter Land and John Dossetor in 1990. Its outcome was published in a book of the same name by Springer in 1991 which proved to be a landmark. While many of the issues discussed at the 1990 congress needed to be revised, a number of important new issues have arisen as a result of the complexity of the fields of interest and because of the many advances in science, technology and indeed in our own approaches and perceptions.

Thus it was timely that the German Academy of Transplantation Medicine brought international representatives of all disciplines involved in organ transplantation together with their own members in Munich to discuss these important issues.

This young German academy is an interdisciplinary forum of people who have focused their interest on issues of transplant medicine. The Academy is made up of philosophers, theologians, jurists, psychologists, sociologists, physicians, clinicians, immunologists, molecular biologists and other researchers who come together to address and discuss these topics in their societal context and in their normative dimension. The Academy has recognized that we definitely need global discussion and a reasoned approach to ethical questions and dilemmas that are spawned by the desperate shortage of suitable organs for transplantation and also by the many scientific and technological developments in areas such as regenerative medicine that are related to the replacement, repair or regeneration of tissues and organs.

The Academy is committed to the German legal order as well as to fundamental ethical and juridical principles that are based on universally accepted norms. It should be recognized, however, that rules and principles of our moral common sense and social norms can change remarkably with time. Some of those societal values of the past which have changed over the last 150 years are well known. They include challenges to previously accepted norms such as: 1) subordination of women to their husbands; 2) homosexuality between consenting adults being always morally wrong and its practice being a crime; 3) acceptability of buying and trading vulnerable persons as slaves, and so forth. In the field of medical ethics there have also been shifts during the past 30 years. One of the most important changes has been in how doctors interact with patients. Patient autonomy in decisions affecting their treatment or participation in medical research is now the unquestioned norm. “Biomedical ethics” and “biomedical law” have emerged as an interdisciplinary approach of philosophical moral theory, jurisprudence and medicine. The Hippocratic tradition, on which we based our practice in the past and which is still valid in many individual patient-doctor engagements, has proven to be inadequate when dealing with more complex societal issues, especially with the distribution of scarce health care resources. Many normative problems of organ transplantation have had to be thoroughly re-evaluated. Political and law-making bodies have tried to keep up with these developments, but have not always been successful.

It is with these considerations in mind that the Academy decided to bring together scholars from around the world to this congress in Munich.

While it is true that in the last analysis many of the issues discussed must be decided upon not by physicians, scientists and ethicists, but by our law-makers, it nevertheless is our moral obligation and professional responsibility constantly to question, analyse and re-evaluate not only the empirical knowledge of our disciplines, but also the moral and legal context we are part of and to use these analyses and assessments for a proper interaction with the public.

As can be seen from the content of this book, issues such as living organ donation, equitable organ allocation, financial incentives versus commerce in organ donation, embryonic stem cell research, regenerative medicine and xenotransplantation have been explored and discussed by prominent and internationally acknowledged experts in their fields – together with distinguished colleagues attending this congress.

The intention of all the debates during the meeting was to discuss dispassionately newer arguments based on rational and sound reasoning. Such a spirit of discussion guaranteed a fruitful, constructive debate without wasting time with worn arguments we all already know. The final goal of the congress was to arrive at conclusions which can be justified by sound ethical principles and analyses, as well as to isolate those problems for which, for the time being, no consensus has emerged. Some ethical dilemmas and conflicts obviously cannot be resolved in a way that is convincing and satisfactory for all and in some respects we will have to tolerate conflicting policies between one culture or nation to another. We believe that the congress was successful in achieving these objectives.

Most of its goals and aims really were addressed. All the difficult ethical issues were approached on the basis of open discourse – a discourse between medical ethicists, philosophers, lawyers, theologians, transplant clinicians, transplant coordinators, nurses, and patients. A key objective was to arrive by consensus at important resolutions. These are published in the concluding section of this book.

Finally, the editors wish to thank Ms. Susanne Martin, secretary of W. Land, for her devoted assistance in the preparation of this book.

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We look forward to the next major congress on ethical, legal and social issues in organ transplantation.

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Thomas Gutmann
Munich, Germany

Abdallah S. Daar
Toronto, Canada

Robert A. Sells
Liverpool, UK

Walter Land
Munich, Germany

I. Introduction

Is there a Universal System of Ethics or are Ethics Culture-Specific?

R. M. Veatch

Kennedy Institute of Ethics, Georgetown University, Washington, DC, USA

When organ transplantation is viewed in international perspective, it leaves the appearance of a cacophony of disparate ethical commitments. Scandinavian, Southern European, and Asian cultures treat organs as the property of the state to be used for socially beneficial purposes without the consent of the one from whom the organs are taken (usually with “opt-out” provisions) (Soh, Iyer, and Lim, 1992; Prottas, 1985; and Stuart, Veith, and Cranford, 1981). They have what used to be called “routine salvaging laws” (Dukeminier and Sanders, 1968). On the other hand, other cultures insist on a “gift relationship” in which organs must be donated by the source before they can be used for transplant (Sadler, Sadler, and Stason, 1968; Ramsey, 1970; cf. Titmuss, 1971).

Some standing in more libertarian economic and moral traditions insist that people should have the right to sell their organs to the highest bidder and that those needing organs should be able to buy. It is in fact reported that certain countries including India, The Philippines, Iraq, Iran, and Kuwait have tolerated or openly supported at least some market transactions. At the same time many have insisted that payment for organs is unethical and ought to be illegal (Veatch, 1984; Caplan, 1984). In fact, any payment in exchange for an organ is illegal in the United States (United States Public Law 98-507, 1984) and many other countries.

There is some degree of international consensus on the dead-donor-rule (Arnold and Youngner, 1993), but much less agreement from one culture to another about what it means to be dead (Veatch, 1975 and 1993; Browne, 1983; Bernat, 1992; Truog, 1997; Shewmon, 2001). Many governments endorse whole-brain death, but Asian (Kimura, 1991), Jewish (Bleich, 1979), and Native American (President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, 1981, p. 41) cultures resist abandoning cardio-respiratory definitions. There has been more controversy in Denmark than in most other European countries (The Danish Council on Ethics, 1989). Meanwhile many philosophers have long insisted on a higher-brain-oriented view (Veatch, 1975; Green and Wikler, 1981) and the British have decided to go it alone for something called “brain-stem-death” (Pallis, 1982). The Japanese resist taking organs from the brain-dead, but are more comfortable with living donation while Americans presently have a near-total prohibition on living liver donation for use in adults, but eagerly support cadaveric procurement.

The transplant world lends itself to the claim that ethics are culture-specific. (Since, in this context, the word *ethic* is sometimes taken to refer to a particular culture's “ethic,” we can at this point refer to different cultures having “ethics” in the plural – a usage common to those not trained in philosophy, but usually eschewed by ethicists unless they are referring to the different ethical systems, that is “ethics” of different cultures.)

Ethics as Universal

At the same time, the very nature of saying something is ethical or unethical is to make a claim that is, in some sense, universal. We believe that all people in all cultures *ought* to see such practices as morally right or wrong – not mere societal preferences about which any nation may exercise its option with impunity. Those who use the language this way distinguish between matters of ethics and matters of mere cultural or individual preference. Saying that a transplant policy is ethical is – at the same time – saying that everyone in any society ought to see the policy as one calling for general moral approval. The fact that some people in some cultures do not approve of such a policy is taken by one using the word *ethics* this way to mean that those who disagree have made a mistake rather than that they merely have different preferences.

In order to understand what is meant by the claim that there is a “universal system of ethics” we will need to get clear on what it means for an ethic to be “universal,” why that does not imply a rigid application of moral rules leading to exactly the same moral conclusions in widely differing cultures, and how we should respond to the obvious empirical observation that, as a matter of brute fact, there are important cultural differences in ethics in organ transplant as well as in any other area.

It is widely held by people working in bioethics (as well as in ethics more generally) that there is a universal or “common” morality that is agreed to by all reasonable people. This does not mean that all acts of a certain category – all acts of killing or lying or breaking promises, for example, must be judged identically. It does not mean that all acts of lying are morally wrong for all time for all places in the world or that all acts of killing are morally condemned. It does mean that there is among virtually all reasonable people a shared set of pre-theoretical moral perceptions or intuitions. These lead to a short list of moral characteristics of actions that tend to make these actions morally right or wrong and that this list seems to be shared by all peoples of the world. For example, the Universal Declaration of Human Rights is endorsed by virtually all states and almost all peoples throughout the world.

Likewise, in bioethics, it is claimed that some short list of principles – including beneficence (the duty to benefit), nonmaleficence (the duty not to harm), autonomy, and justice as well as perhaps fidelity, veracity, and avoidance of killing – are subscribed to in some form by all peoples. These principles consistently show up in the codes of various religions, the philosophical systems of various philosophers, and the legal codifications of various governments. This means that we can, cross-culturally, hope to have some limited moral agreement on the rightness or wrongness of certain behaviors.

To the extent this is true, it would seem to apply to policies on the procurement and allocation of organs. Can we conclude that either the donation model or the routine salvaging model is the morally correct one for all cultures so that at least one of the present patterns is morally wrong? Can we conclude that the donation model with its individualistic premises is the morally correct model? Or alternatively, can we discover that, to the surprise of the defenders of the donation model, routine salvaging with its foundations in communitarianism and social solidarity is morally superior? If so, the defenders of the donation model would be morally obligated to change from donation to salvaging as their method for procuring organs. Let us begin this exploration by recognizing that, indeed, the idea of a universal morality has direct implications for organ procurement. We at least seem to be able to agree, almost universally, that certain forms of organ procurement are immoral and should be seen internationally, universally, as unethical. For example, a straightforward utilitarian might hold that

there are some people who are quite useless to the society who nevertheless possess many organs and tissues that would be very useful to others. Killing such people would mean a small loss in utility for the one who is killed and an enormous gain for the community: many valuable lives could be saved for each nearly useless person killed.

Nevertheless, such proposals are given no serious consideration in civilized countries of the world. Even the Chinese, who have been accused of killing prisoners for the purpose of obtaining organs for transplant, militantly deny that they have such a policy. They insist there is prisoner consent for organ procurement. Whatever their actual practice, they clearly share the moral rhetoric that recognizes that such utilitarian procurement is condemned as immoral.

A second example: There is something very close to a universal agreement that a totally free market in organs is morally unacceptable. Some people advocate acquiring organs by the payment of money (Peters, 1991). Sometimes this is called an "incentive" (Peters, 1992) or "rewarded gifting" (Daar, 1992; Dossetor, 1992; Alexander, 1992; cf. Murray, 1992) to make it sound better, but it is, if we are honest, still a cash payment to obtain organs. There remains some controversy over the use of these payments to procure organs. What seems to be almost universally condemned is the allocation of these organs explicitly on the basis of the ability of the recipient to pay the highest price (United Network for Organ Sharing, 1993). Even most of the advocates for market incentives to procure, still want the procured organs to become the property of the society so that they can be fairly distributed (Gill and Sade, 2002).

A third and more unexpected example: I want to claim that policies that presume the consent of the deceased to procure organs are also universally immoral (Veatch, 1991; Veatch and Pitt, 1995). This might surprise those who are experienced in organ procurement policy because the literature in the field is rich with proposals for presumed consent for procurement and many articles in the literature claim that various Scandinavian, southern European, and Asian countries actually have presumed consent laws (Caplan, 1983; Matas and Veith, 1984; Gerson, 1987; and Hull, 1992).

This is simply a mistake. No Scandinavian, European, or Asian country of which I am aware has an organ procurement law that explicitly presumes consent of the deceased. I did an exhaustive study of the national procurement laws and discovered, much to my surprise, that none of these nations have laws that rest on the presumption of the consent of the deceased (Veatch and Pitt, 1995). What they have is something very different. They are routine salvaging laws. They have laws that authorize taking of organs without the consent of the deceased. Usually, those laws have what is called an "opt-out" provision. They permit the state to take organs without consent unless the individual while alive as opted out and has given an explicit refusal to let organs be used. These laws are thus called "routine salvaging with opting out."

What they should *not* be called is "presumed consent laws" and, in fact, none of these laws contain that terminology. The reason is philosophically important. It is one thing to take someone's property or body parts with a valid presumption of his or her consent. It is quite another thing to take them without presuming they would consent, that is, take them simply because the state has the power over the individual to acquire the individual's asset without any consent whatsoever. Societies committed to the donation model might be content with taking organs on a truly valid presumption of consent, but they would be categorically opposed to taking without any form of consent.

There is nothing wrong with presuming that individuals would consent *provided there is a valid basis for making the presumption*. For example, in most nations there are laws presuming consent for treatment of unconscious living patients brought to an emergency room. Those are reasonable laws because virtually all who imagines themselves being brought to a

hospital in an unconscious state would want to be treated. They would consent to treatment if they could express their wishes (which they cannot). Thus there is good empirical evidence that the presumption of consent for emergency room treatment rests on a valid belief that people really would consent.

The situation is very different in organ procurement. In the United States, less than half of the people asked to donate their own or their loved one's organs consent to do so. That seems to be roughly the pattern in other countries. If we presumed the consent of this population, we would be wrong over half the time. The presumption is simply not warranted. It is empirically untrue.

Why then, do people persist in referring to laws as "presumed consent" laws when, in fact, the laws are really routine salvaging laws? They are laws that authorize the state to take organs. I think it is because speaking of "presumed consent" sounds like we are keeping organ procurement in the donation model. We are "constructing a consent" thus avoiding the harsh sound of claiming that we are engaged in routine salvage in which the state can take organs without permission. It sounds much nicer, at least to people who favor donation, to say a nation presumes consent than to say it takes without consent. It sounds nicer even though these states in actuality are really just taking the organs if they do not ask permission.

Calling a law a "presumed consent law" is thus dishonest. It claims there is a consent when there is not. That is why a national policy that presumes consent would be rejected by all reasonable moral people. It is a dishonest portrayal of routine salvaging, perhaps intentionally misleading people by making the policy sound like it is still in the donation mode.

This does not, however, mean that *honest* policies of routine salvaging are necessarily immoral. If routine salvaging violates the standards of universal morality, if it violates the United Nations Declaration of Human Rights, for example, then all those countries who choose to have such a policy deserve to be condemned. They deserve to be condemned in the same way we would condemn a country that intentionally killed socially unproductive citizens in order to get their organs. I am not prepared to offer such condemnation of a country that has a publicly announced policy of routine salvaging, especially if that country honors the right of objectors to opt out of the policy.

If there is a set of universal standards for morality to which all nations and all cultures are obliged to conform, some behaviors are beyond toleration and must be condemned – as is the case with the killing of the innocent for purposes of procuring organs. Any nation doing so must be condemned. There must be, however, a range of behaviors that *is* tolerable according to such universal standards. There is no need for every culture to adopt exactly the same social policies on all matters of public and private conduct. Forcing women into subjugation so that they are forced to wear a burqua against their will and are beaten if they appear in public deserves international condemnation. Permitting women to dress modestly of their own free will and cover their faces is not the pattern that your culture or mine chooses to follow, but it probably does not warrant international condemnation. A range of behaviors is tolerable by international standards of morality. That in no way disproves the claim that ethics is universal. It merely acknowledges that some matters of public policy and practice are not matters of ethics at all, but merely matters of individual or societal preference. For a nation to intentionally, deceptively call a routine salvaging policy "presumed consent" in order to gain support from those who favor the donation model is dishonest and violates the universal standard that requires "publicity," a willingness to acknowledge publically the behavior in which one engages. It is immoral. On the other hand, it is not at all clear that any violation of a universal standard is at stake if some nations opt for the model of routine salvaging with opting out while other nations choose a donation model requiring opting in. At least we

have not developed a decisive proof that any universal standard has been violated in this case.

There is still a third possibility, however. It could be that some behaviors are really matters of ethics (that is, there is some universal standard to which the behavior ought to conform), but nevertheless finite human beings may be incapable of definitively knowing what the correct behavior is. It could be that either the opt-out salvaging model or the opt-in donation model is the only one that conforms to some universal standard of ethics. It may be that reason carefully pursued would eventually force us to approve of only one or the other. Or it may be that God only approves of one. We may nevertheless be sufficiently unclear on what the morally right policy is that we agree to tolerate those who disagree with us. We might do so while nevertheless thinking that they are mistaken ethically. That is quite different from believing that the question is really nothing more than societal preference. In this case, we each can think there is a morally right answer, but we will not be sure enough about what that answer is that we feel comfortable demanding that others conform. Moral toleration is not moral relativism. It is simultaneously a belief that one behavior is right while others should be tolerated.

This analysis defends the claim that there is a cross-cultural, pre-theoretical “common morality,” a common set of moral intuitions perceived similarly regardless of cultural grounding and that the most obvious explanation of this common morality is that humans believe that, at least for some matters, there is a single universal set of ethical norms that everyone should accept.

Humans from time to time make efforts – sometimes feeble efforts – to formulate codes that attempt to summarize this single universal set of ethical norms. Most of these come from sources outside the medical profession. In ancient times these appeared in religious documents, such as the Ten Commandments. In modern times, they appear in such declarations as the Universal Declaration of Human Rights or, in medicine, in the declarations of the World Health Organization.

Medical professional organizations sometimes attempt such summaries of universal medical ethical norms, such as in the World Medical Association’s Declaration of Geneva or, in the area of human subjects research, its Declaration of Helsinki. There is a potential problem with these professionally generated declarations, however. They are the product of private, highly restrictive, and highly selected groups of professional organizations. Many of us in this room are not members of these organizations and technically have no standing to voice opinions regarding the efforts to articulate these codes. We know that when those with authority to articulate codes of conduct or bills of rights are drawn from narrow segments of the population, the risk of bias distorting the effort is high.

That is why I much prefer the more public international efforts at writing summaries of the universal moral norms. The Nuremberg Code is technically more legitimate than the Declaration of Helsinki for this reason. The Council of Europe’s Bioethics Convention (Council of Europe, 1997) is for this reason a powerful international statement of human rights in biomedicine, in spite of the fact that it is geographically limited to Europe.

The Counter-Claim: Ethics Seem Culturally Specific

That raises the question of why disagreement persists if there really is this so-called common morality. I have already catalogued endless disagreement on policies in organ procurement and allocation. How can one hold out hope that there is a common morality that is universal

in the face of disputes over what it means to be dead, over whether we can take organs from living persons, over whether we need advanced consent for the dead before organs are removed from their dead bodies, and so forth?

The defenders of the common morality thesis are not so naive as to deny the obvious extent of moral dispute in the transplant community. The moral tension is pervasive. Rather they make a more careful claim: they defend what I will call “refined moral universalism.” They claim that, with more careful analysis of moral judgments it becomes plausible to hold that reasonable people from any place in the world share would set of general moral norms about right and wrong. I suggest five steps in refining the universalist’s claim.

(1) Considered Moral Judgments

First, any defender of the claim that ethics is universal has to acknowledge that the initial perceptions upon which people gain an intuitive moral knowledge of the basic norms must be refined into what is sometimes called “considered moral judgments.” Humans are fallible creatures. In matters of the natural sciences it is common knowledge that our initial sense perceptions are crude and subject to erroneous interpretation. It is not surprising that defenders of the common morality thesis would make the same claim for moral sense perceptions. They need to be refined into considered moral norms, not merely left as raw moral intuitions.

Agreeing on the Nonmoral Facts

That refining involves at least three steps. In the first place, if moral perceptions are compared cross-culturally it is crucial that all parties are working with the same nonmoral facts. Consider the obvious example that, in places like India, Iraq, and the Philippines, there is a widely held perception that it is morally acceptable for people to sell their kidneys while in Germany and most of Europe that practice is condemned. It is condemned as well in the United States. It is currently illegal, in fact.

That might at first seem to provide obvious evidence that there is no commonly shared set of moral sense perceptions. While that might be the plausible first impression, it would be wrong. It could be that Indians, Iraqis, Filipinos, Germans, and Americans are not thinking of exactly the same factual situations when they express intuitions about selling kidneys. Germans and Americans no doubt take into account the fact that some poor people might be pressed into selling their kidneys. They probably also take into account the fact that their societies are wealthy enough that, with the properly inclined will, the society could meet the basic needs of its poor and that tolerating a market in organs would have the effect of letting society off the hook for its basic welfare obligations.

By contrast Indians, Iraqis, and Filipinos may be working with radically different sets of facts. They may know that their desperately poor could not have all their basic needs addressed even if the broader society was of good will in committing to a welfare program.

Members of the wealthy society and the poorer society may actually share the same moral intuitions if all the nonmoral facts are taken into account. Establishing that they would differ if they held the same beliefs about the nonmoral facts is very hard to do. It could be that both kinds of society agree that selling organs is immoral in a society wealthy enough to provide the basic needs of its poorest citizens and fails to do so. It could be that they also would

agree that selling organs is morally tolerable in a society that has no possible means of meeting those needs. Proving that they disagree on their moral intuitions requires establishing that they are working with the same nonmoral facts and that is very hard to do.

Differentiating Preferences from Moral Judgments

Second, it is also possible that some people may incorrectly classify some of their value judgments as “moral” when they are actually nothing more than preferences. In considering our moral judgments, the two have to be carefully separated. For example, some members of my own culture have at times considered questions of women’s skirt length and men’s hair length to be matters of morals. They certainly seem to be moral issues, at least to more parochial members of the culture who have not been exposed to alternative life-style choices. But, on reflection, it seems clear that skirt and hair length involve nothing intrinsically related to ethics. There are some matters that simply cannot be tested against some universal standard of reference; they are cultural preferences and nothing more. To put it another way, when God is asked, She will shrug and say She doesn’t care.

It may be that some disputes in transplantation that are perceived as moral disputes are really nothing more than matters of cultural preference. Whether we have a procurement policy that involves opting in or opting out may in the end be something God doesn’t care about. At least if opt out policies give real opportunity to opt out and opt in policies permit real chances to choose, what sometimes gets taken as a moral dispute really may be nothing more than a matter of what fits a given culture. Again, different factual circumstances, may require different policies.

Removing Inconsistencies in Moral Judgments

Next, in order to develop a more refined set of considered moral judgments, we would have to give people the opportunity to think through the implications of their initial intuitions on those matters that are truly moral rather than mere preferences. We would have to give them a chance to articulate a set of norms that is consistent from one moral issue to the next. The defenders of policies of routine salvaging without individual consent would have to have an opportunity to reflect on the implications of that policy for claims the state might make about control over the body for other purposes – for mandatory research without consent, for invasions of privacy without consent, and the like. Meanwhile the defenders of policies requiring individual consent for organ procurement would have to have an opportunity to reflect on the implications of their position for public health and control of contagious disease, for the state’s authority to tax without individual consent, and the like.

The claim is that humans throughout the world share a common set of moral intuitions and those intuitions could be refined by insisting on using the same sets of facts, differentiating morals from preferences, and by giving opportunities for removing inconsistencies from one moral issue to the next. This would provide a basis for a common set of moral norms that could be expressed in a document such as the Council of Europe’s Bioethics Convention. It is these considered moral judgments that defenders of the common morality thesis claim would exist universally throughout all cultures.

This insistence on refining our moral intuitions into a set of considered moral judgments is just the first step in refining the universalist's claim. The other four steps, I can cover more quickly.

(2) Agreement is more Likely when Norms are Expressed in General Terms

A second step in "refined Moral Universalism": agreement is more likely when norms are expressed in more general terms. There is no doubt that as the moral context gets more and more specific, cultural factors come more and more into play and leave the appearance that ethics is culturally specific. We generally share, for example, common general moral principles pertaining to living donation of organs. We share the notion that taking such organs without the individual's consent is unethical. We likewise share the view that it is morally suspect to procure life-prolonging organs even with individual consent if the benefit to the recipient is trivial or the risk to the donor is extreme. We may differ on moral judgments as we attempt to become more specific. We may differ on the ethics of procuring liver or lung lobes. We may differ on exactly how old a donor has to be before his or her consent to donate is acceptable. These differences may, in part, rest on factual differences – the risks of surgery in various cultures and the maturity level of a culture's adolescents. What is more basic, however, is that there is a wide range of agreement as long as we remain at the more general or abstract level. We accept a principle like the principle of autonomy that requires consent to legitimate donation. We accept the idea that we cannot kill by taking organs even with consent. The universalist's claim regarding common morality is sound when taken at an adequate level of generality.

(3) General Norms are True *Prima Facie*

Third, we need to recognize that even general ethical norms can conflict with one another. If two general norms conflict, the norms cannot both prevail. In that case, philosophers in some cases say that the norms are both true *prima facie*. Any ethical system needs a set of priority rules to resolve potential conflict among its norms. There is no doubt that cultures vary in the way they structure their priority rules for resolving conflict among competing moral principles.

Consider the question of whether a liver procured from a donor discovered to be HIV-positive should be put into a person who has been waiting for a liver and who is near death. A well-recognized moral rule in medical ethics is the rule, "do no harm." Physicians have a strong resistance to doing anything to patients that predictably will cause them harm. They will resist implanting an HIV-infected organ. On the other hand, medicine also has a well-established rule that an important goal of medicine is to preserve life. What should a surgeon do who discovers that the only likely way to save a critically ill patient in liver failure is to transplant him using an HIV-positive organ?

In the United States transplanting that liver is almost universally condemned. The "do no harm" rule prevails. On the other hand, if I ask patients on the waiting list, I get surprising answers. Some on our liver waiting list are themselves HIV-positive. In large numbers they tell me that they would seriously consider accepting an HIV-positive organ. In fact, I have had

many HIV-negative patients waiting for livers tell me that. If it were a critical matter of life or death, they would consent to accepting the liver.

When two moral norms conflict, in this case, the rules to do no harm and to preserve life, we should expect that people in different cultures will resolve the conflict differently. That should not undercut the important insight that there is near universal agreement on the underlying norms – that it is bad for a surgeon to harm a patient and that it is good for the surgeon to help save the patient’s life. In some cases, two such norms may turn out to be binding *prima facie*, that is, on first consideration. That surgeons (and the rest of us) in different cultures balance that trade-off differently, should not cloud the fact that they almost universally accept the underlying *prima facie* norms.

(4) Morality can be Expressed in Different Words

The fourth step in refining the universalist’s claim is recognition that even people who share a common set of moral insights may use different language to express those insights. This is a problem in the natural sciences as well. The history and philosophy of science is full of examples of confusions that were created because two scientists, perhaps in different cultures, used the same word to express somewhat different concepts or different words to express similar concepts. Words such as “atom” and “proof” come to mind.

The problem is even more severe in moral science in which observational comparisons are difficult to make and concepts can be more complex. In medical ethics, words such as “kill” and “dead” and “consent” all have many different shades of meaning. And that is true even within the English language. If moral discourse must take place across different languages, it is no wonder that the perception of cultural specificity can be created even if no real underlying differences exist. Certain words central to transplantation ethics (such as “freedom” or “donation” or “fairness”) do not always translate precisely and univocally from one language to another.

In one famous American case, the parents of an anencephalic daughter wanted to donate her organs even though she was classified as being born alive and still living. The transplant community resisted taking organs from a still living being. The legal dispute that eventually emerged had to clarify such questions of exactly what anencephaly meant. The Greek literally means that the baby was “without brain” (which would, of course, make her deceased by brain death criteria), but this child was breathing and therefore had some brain stem activity. She clearly was an anencephalic with a brain. We next had to clarify what it would mean for this baby to be dead (so that organs could be taken in conformance with the dead donor rule). The idea that an anencephalic with a brain could be alive though terminally ill and permanently without cerebral function was confusing not only to the parents, but to the physicians and attorneys as well.

Even speakers of the same language may use words in ways that carry subtly different shades of meaning. They are, to use the technical term, *incommensurable* usages. The parents were accused of wanting to kill the baby, but the word *kill* is one of the most complex in the language. It can variously refer to active and intended actions leading to death, omissions of treatment leading to death, unintended actions that nevertheless lead to death. It sometimes is taken to refer only to actions that are immoral while others will talk about “justifiable killing”, making clear that to them not all killings are immoral. We have a range of terms: killing, homicide, murder, manslaughter, and withdrawal of life-support, each with its own subtle

meaning that may not be used identically by all speakers. When procurement surgeons are accused of wanting to “kill” an anencephalic (no brain) infant who still has brain function to get organs, it is not at all clear whether all parties are assigning the same meaning to the words.

Postmodern theories of philosophy of science reveal that many different descriptions of reality can exist simultaneously that may be incommensurable without necessarily being contradictory. The same is true in ethics (including organ transplant ethics). When participants in organ transplantation in different cultures use different words to express what appear to be differing moral positions, it is very difficult to know whether the differences are real or apparent.

These first four steps in refining moral intuitions will often, perhaps always, lead to the view that moral norms are universal. We first need to establish that the speakers are really referring to the same nonmoral facts, properly distinguishing between preferences and matters moral, and working with a set of norms that are internally consistent. We then must make sure that they are expressing differences that must be attributed to different general moral norms rather than only differences in specifying how the norms might be applied in a specific cultural situation. We next need to determine whether the parties in apparent disagreement are working with the same general norms or principles and merely relying on different priority rules for resolving conflict among principles. And most critically, we need to try to determine whether the parties are using the terms in the same way or are talking past one another by using incommensurable terminology.

If all of these first four steps are followed carefully, I think we will find that there is not only a set of shared moral, but that even though we are all finite and fallible, most of us will most of the time find that there is a universal system of ethics that will provide a basis for a morality of organ transplantation that will permit consistency not only across Europe, but throughout the world.

(5) Acknowledging Rare Instances of People with Stunted Moral Senses

If we pay heed to the difference between cultural preferences and universal morality and confess our human fallibility in a way that permits tolerance not only of different preferences but also different specifications of moral norms, we can simultaneously affirm a universal system of morality and work with differently-formulated moral stances from transplant programs in different cultures. Only on rare occasions will we have to turn to the fifth step in working out a refined universal morality. That is to acknowledge that occasionally among us there may be some who are morally so stunted in their moral senses that they fail to see what almost all reasonable people see. This occasional case of moral blindness should not prevent us from affirming a common core of morality shared universally throughout human culture.

Conclusion

If these five steps are followed, the question of whether there is a universal system of ethics will have an answer that is more clear than we had anticipated. The answer comes in three parts. First, there exists a common morality that is available to virtually all members of the moral community that, if properly refined, will provide clear international moral guidance on

many matters of organ transplantation: we can't kill people to get their organs and we can't take organs against the explicit refusal of the one from whom they might be taken. We can't intentionally deceive a population by calling a policy "presumed consent" when we know half the population would not consent or referring to cash payments as "rewarded gifts."

On the other hand, and this is the second part of the answer, many other policy issues are mere matters of cultural preference (including some that might mistakenly be taken as matters of ethics). God really doesn't care whether we spend scarce resources pumping kidneys to gain marginal benefit or spend those resources of some other medically needy group.

Third, still other questions are probably real ethical issues about which societies, in principle, ought to recognize that a certain policy is ethically required, but the alternatives are sufficiently reasonable that – given human fallibility and the need for tolerance – we will tolerate conflicting policies from one culture to another. Whether we have an opt-out or and opt-in strategy for procuring organs probably is in that category. Whether we permit modest payments to family members who consent to organ procurement is probably another. Even if there is a single universal standard by which our transplant programs ought to be judged, that standard will be indifferent on some policy questions (which are mere matters of cultural or personal preference) and will be obscure enough on others that we should show respect and tolerance for those we think have made a moral mistake.

References

1. Alexander, J. Wesley. "Pro: Rewarded Gifting Should Be Tried." *Transplantation & Immunology Letter* 8 (No. 1, March 1992): 4, 6.
2. Arnold, Robert M., and Stuart J. Youngner. "The Dead Donor Rule: Should We Stretch It, Bend It, or Abandon It?" *Kennedy Institute of Ethics Journal* 3 (No. 2, 1993):263-278.
3. Bernat, James L. "How Much of the Brain Must Die on Brain Death?" *The Journal of Clinical Ethics* 3 (No. 1, Spring 1992):21-26.
4. Bleich, J. David. "Neurological Criteria of Death and Time of Death Statutes." *Jewish Bioethics*. New York: Sanhedrin Press, 1979, pp. 303-316.
5. Browne, Alister. "Whole-Brain Death Reconsidered." *Journal of Medical Ethics* 9 (March 1983):28-31.
6. Caplan, Arthur L. "Organ Transplants: The Costs of Success, An Argument for Presumed Consent and Oversight." *Hastings Center Report* 13 (December 1983):23-32.
7. Caplan, Arthur. "Ethical Issues in the Sale of Human Organs for Transplantation." *Bioethics Reporter* (January 1984), pp. 6-8.
8. Council of Europe "Convention for the Protection of Human Rights and Dignity of the Human Being with Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine." Strasbourg : Conseil de l'Europe, 1997.
9. Daar, Abdallah S. "Rewarded Gifting." *Transplantation Proceedings* 24 (Oct. 1992):2207-11.
10. Dossseter, John B. "Rewarded Gifting: Is It Ever Ethically Acceptable?" *Transplantation Proceedings* 24 (Oct. 1992):2092-94.
11. Dukeminier, Jesse, and David Sanders. "Organ Transplantation: A Proposal for Routine Salvaging of Cadaver Organs." *New England Journal of Medicine* 279 (1968):413-19.
12. Gerson, William N. "Refining the Law of Organ Donation: Lessons from the French Law of Presumed Consent." *New York University Journal of International Law and Politics* 19 (No. 4, 1987):1013-32.
13. Gill, Michael B., and Robert M. Sade. "Payment for Kidneys: The Case for Repealing Prohibitions." *Kennedy Institute of Ethics Journal* 12 (March 2002):17-45.

14. Green, Michael B., and Daniel Wikler. "Brain Death and Personal Identity." *Philosophy and Public Affairs* 9 (No.2, Winter 1980):105-133.
15. Hull, Alan R. "Dwindling Donations Make Presumed Consent a Proposal Worthy of Consideration." *Nephrology News & Issues* (October 1992):28-29.
16. Kimura, Rihito. "Japan's Dilemma with the Definition of Death." *Kennedy Institute of Ethics Journal* 1 (1991):123-31.
17. Matas, Arthur J., and Frank J. Veith. "Presumed Consent for Organ Retrieval." *Theoretical Medicine* 5 (1984):155-166.
18. Murray, Thomas H. "The Moral Repugnance of Rewarded Gifting." *Transplantation & Immunology Letter* 8 (No. 1, March 1992):5, 7; Kahan, Barry D. "Rewarded Gifting – PRO and CON: Bringing the Arguments Into Focus." *Transplantation & Immunology Letter* 8 (No. 1, March 1992):3.
19. Ohnuki-Tierney, Emiko; Angrosino, Michael V.; Becker, Carl; Daar, A.S.; Funabiki, Takeo; Lorber, Marc I. "Brain Death and Organ Transplantation: Cultural Bases of Medical Technology. [Article, Comments, and Response]." *Current Anthropology* 35 (3)(1994 Jun):233-254.
20. Pallis, Christopher. "ABC of Brain Stem Death: Diagnosis of Brain Stem Death." *British Medical Journal* 285 (November 27, 1982):1558-1560, and 285 (December 4, 1982):1641-1644.
21. Peters, Thomas G. "Financial Incentives in Organ Donation: Current Issues." *Dialysis & Transplantation* 21 (No. 5, May 1992):270-273.
22. Peters, Tom G. "Life or Death: the Issue of Payment in Cadaveric Organ Donation." *Journal of the American Medical Association* 265 (March 13, 1991):1302-05.
23. President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research. *Defining Death: Medical, Legal and Ethical Issues in the Definition of Death*. Washington, D.C.: U.S. Government Printing Office, 1981.
24. Prottas, Jeffrey M. "Organ Procurement in Europe and the United States." *Milbank Memorial Fund Quarterly/Health and Society* 63 (No. 1, 1985):94-126.
25. Ramsey, Paul. *The Patient as Person*. New Haven, Connecticut: Yale University Press, 1970.
26. Sadler, A. M., B. L. Sadler, and E. Blythe Stason. "The Uniform Anatomical Gift Act." *Journal of the American Medical Association* 206 (Dec. 9, 1968):2501-06.
27. Shewmon, D. A.. "The Brain and Somatic Integration: Insights into the Standard Biological Rationale for Equating 'Brain Death' with Death." *Journal of Medicine and Philosophy*. 26 (No. 5, 2001):457-78.
28. Soh, P., T.K.K. Iyer, and S.M.L. Lim. "Profile of an Asian 'Opting-Out' System--The Institutional and Legal Arrangements in Singapore." *Transplantation Proceedings* 24 (No. 4, August 1992):1323-1324.
29. Stuart, Frank P., Frank J. Veith, and Ronald E. Cranford. "Brain Death Laws and Patterns of Consent to Remove Organs for Transplantation from Cadavers in the United States and 28 Other Countries." *Transplantation* 31 (April 1981):238-244.
30. The Danish Council of Ethics. *Death Criteria: A Report*. Copenhagen, Denmark: The Danish Council of Ethics, 1989.
31. Titmuss, Richard M. *The Gift Relationship: From Human Blood to Social Policy*. New York: Random House, 1971.
32. Truog, Robert D. "Is it Time to Abandon Brain Death." *Hastings Center Report* 27 (1)(1997 Jan-Feb):29-37.
33. United Network for Organ Sharing, Ethics Committee, Payment Subcommittee. *Financial Incentives for Organ Donation*, 1993. Unpublished paper available on the Internet at <http://www.unos.org/resources/bioethics.asp?index=3>.
34. United States Public Law 98-507, October 19, 1984. *National Organ Transplant Act* 98 Stat. 2339.
35. Veatch, Robert M. "Routine Inquiry About Organ Donation--An Alternative to Presumed Consent." *The New England Journal of Medicine* 325 (October 1991, No. 17):1246-1249.
36. Veatch, Robert M. "Statement Before the Subcommittee for Investigations and Oversight of the Committee on Science and Technology." In *Procurement and Allocation of Human Organs for Transplantation; Hearings before the Subcommittee on Investigations and Oversight of the Commit-*

- tee on Science and Technology, pp. 343-353. U.S. House of Representatives, Ninety-eighth Congress, Nov. 7, 9, 1983. U.S. Government Printing Office (1984).
37. Veatch, Robert M. "The Impending Collapse of the Whole-Brain Definition of Death." *Hastings Center Report* 23 (July-August 1993, No. 4):18-24.
 38. Veatch, Robert M. "The Whole-Brain-Oriented Concept of Death: An Outmoded Philosophical Formulation." *Journal of Thanatology* 3 (1975):13-30.
 39. Veatch, Robert M., and Jonathan Pitt. "The Myth of Presumed Consent: Ethical Problems in New Organ Procurement Strategies." *Transplantation Proceedings* 27 (April 1995, No. 2):1888-1892.
 40. Williams, Walter. "Vital Organs--Let the Market Decide." *Washington Times* (April 19, 1984).

II. Equitable Allocation of Organs

Organ Allocation on the Basis of Medical Criteria: Current International Practices

G. G. Persijn, J. Smits, M. Smith, U. Frei

Eurotransplant International Foundation, Leiden, The Netherlands

Allocation, i.e. the distribution of scarce goods like donor organs is, next to triage, one of the most sensitive topics in medicine. As long as there is an ever increasing demand for donor organs and an even decreasing trend in the supply of organs it will be hotly discussed among ethical, medical and legal experts, but also amongst the general public.

At the end of the nineties legislation on organ donation and transplantation was introduced in different European countries paying great attention to organ allocation. Great emphasis was given to the criteria used in allocation practices, especially to the medical and patient oriented criteria. In the discussions different parameters are nearly always mentioned such as clinical urgency, waiting time, primary diagnosis, ischemia times, transplant outcome, procurement and transplantation ratios, pediatric recipients and so on. As often stated allocating donor organs is similar to choosing between Scylla and Charybdis or balancing between utility and justice.

The initiative taken by the ministers of health of the six countries participating within the framework of the Eurotransplant International Foundation (Austria, Belgium, Germany, Luxembourg, the Netherlands, and since January 1, 2002, Slovenia) leading to a very supportive joint declaration is in this respect a very helpful and important tool. They stress the importance of international collaboration in organ transplantation by using a fair, objective and transparent allocation system according to medical criteria. Other important components in this framework are safety and quality requirements, follow-up of the results and involvement of the governmental authorities as well as the transplantation professionals. Consensus is in this respect an enormous important factor.

The basics are to maximize equality of opportunity for all patients awaiting an organ, but also that allocation procedures must ensure justified, genuine distribution across the participating countries in a manner that takes into account the solidarity principle within each country. The latter leaves room for domestic regulatory rules and guidelines. In accordance with the above-mentioned principles the allocation systems for different organs were adapted and implemented in Eurotransplant (ET). The different current practices of kidney allocation in ET and some other countries will be presented.

International Practices

Germany:

Since the introduction of the law on organ donation and transplantation in Germany in 1997, the so-called “Transplantationsgesetz”, the allocation of organs is legally defined. Article 12, paragraph 3, states clearly that “organs should be in agreement with the most up to date state of medical science and knowledge, allocated to eligible patients, especially according to success rate and urgency”.

Netherlands:

The Dutch law on organ donation and transplantation which was introduced in 1996 defines in article 18, paragraphs 2 and 3, that “the allocation should be solely based on blood and tissue compatibility from donor and recipient, medical urgency of the recipient and other factors related to the condition of the organ. If no decision can be made, then the waiting time of the recipient has to be taken into account”.

Belgium:

In a Royal Decree of November 1997, based on the law of 1986 regulating the procurement and transplantation of human organs, the allocation of organs is described in detail (article 7). The allocation institution (i.e. Eurotransplant), should effectuate the legally defined rules for allocation, namely: compatibility of the organ with the recipient, the medical urgency and the effective waiting time of the potential recipient. Furthermore, there should be an acceptable balance between the number of organs exported from and imported into Belgium. Also, the distance between procurement centre and the transplant centre should be taken into account. Finally, transplant candidates must have either Belgian nationality or permanent residency in Belgium. Also allowed are patients fulfilling similar criteria but living in one of the other countries participating in Eurotransplant.

United Kingdom:

The Kidney Organ Sharing Principles, functioning as the Operating Principles for Renal Transplant Units in the United Kingdom, were first published in May 1999 (see: www.uktransplant.org.uk). Allocation of organs should, in a fair and unbiased way, be based on the patient’s need and the importance of achieving the closest possible match between donor and recipient. Allocation rules are determined by the medical professionals, the Department of Health and specialist advisory groups. The basic kidney allocation factors are: blood group compatibility and HLA-A,B, DR matching of donor and recipient; the better the match, the greater the chances of success. A three tier matching system has been introduced:

1. a complete, identical match between donor and recipient
2. a favorable match
3. a non-favorable match

The degree of compatibility determines whether the kidneys are used by the nearest transplant centre or elsewhere in the country.

Australia:

The kidney allocation system in Australia is dependent upon:

1. The National Matching Algorithm
2. The State Matching Algorithm
3. The State Application of Matching Results

The principles are that there should be a balance of donated versus received kidneys between the 5 different states of Australia. The outcome should be maximized and the distribution should be equitable. The exchange criteria are: HLA-match, degree of sensitization (PRA >50%, waiting time on dialysis, state balance and a bonus for pediatric candidates. (see: www.racp.edu.au/tsanz/index.htm). The National Renal Transplant Advisory Committee, consisting of clinical representatives from each state as well as from the Transplantation and Nephrology Societies of Australia and New Zealand as well as from tissue typing laboratories, is responsible for the management of the cadaveric renal transplantation allocation system.

United Network for Organ Sharing (USA):

The Network for Organ Sharing (UNOS) operates the Organ Procurement and Transplantation Network (OPTN) under contract with the US Department of Health and Human Services. The most relevant factors in the allocation of kidneys from post-mortem donors are: blood type, time spent awaiting a transplant and the relative distance between donor and recipient. Vital factors are the medical urgency of the recipient, the degree of immune-system match between donor and recipient and whether the recipient is a child or an adult (see: www.unos.org and www.optn.org). Thus, ABO blood group compatibility (for O and B donor kidneys, blood group identical recipients) and mandatory exchange of zero HLA-antigens mismatched kidneys. In general, kidneys are to be allocated locally first, then regionally, and then nationally.

Eurotransplant:

In November 2000, the "Joint declaration regarding co-operation within the framework of Eurotransplant International Foundation" was signed by the Ministers responsible for Public Health of the 6 different countries participating in ET.

Concerning allocation, it was stated that an objective allocation system according to medical criteria was essential. The following criteria were defined:

- Most importantly, to maximize equality of opportunity for patients by taking into account objective medical criteria (e.g. compatibility of organ with recipient, the expected transplantation result, medical urgency and how long a recipient has been waiting) as well as individual differences;
- The allocation system must be patient oriented;
- The allocation procedures must be transparent and objective;
- The solidarity principle within each company should be taken into account;
- Safety and quality requirements must be ensured;
- To monitor the transparency and objectivity of the allocation process, follow up must be collected. (see: www.eurotransplant.nl)

A New Kidney Allocation System in Eurotransplant

Prior to March 11, 1996, kidney allocation in the Eurotransplant countries was primarily based on the assumption that the best HLA-A, B, DR match between donor and recipient led to the most successful transplant and the longest survival time for the patient.¹ However, this allocation policy has led to:

- An increase in the number of patients on waiting lists
- A change in the composition of waiting lists
- Differences in procurement rates and acceptance policies between centres and countries
- An increase in the number of highly immunized patients
- An increase in the number of patients who have been waiting for more than 5 years for a transplant
- An increase in the number of patients with rare or so-called homozygous phenotypes (that is with blanks on their HLA phenotype).

Also, not every transplantation centre followed the allocation advice given by the central allocation office. At the time, no legal sanctions could be taken against these centres, although this position has now changed in some of the Eurotransplant countries.

Discussions between transplantation experts from the Eurotransplant countries, together with several simulation studies, led to the development of the new Eurotransplant Kidney Allocation System (ETKAS), which was launched on March 11, 1996.² The main goals of ETKAS were to:

- Shorten the average and maximum waiting times
- Increase the chances of transplant for patients with rare or homozygous HLA phenotypes
- Balance the national kidney exchange rates
- Maintain excellent HLA matching rates and, therefore, optimal graft survival.

The basics of this new allocation system are that all relevant factors and parameters are “caught” in a total sum of points for each individual patient (table 1). To weight all these factors, many simulation analyses have been carried out and thoroughly discussed by the ET Kidney Advisory Committee.

Six Years Later

Nearly 17,000 kidneys for kidney-only transplantations have been allocated, monitored, and co-ordinated by the central Eurotransplant office in Leiden, The Netherlands since the inception of ETKAS. All transplant candidates were assigned points for five allocation factors (see table 1).

1. Number of HLA mismatches with the potential donor
2. Chances of a good HLA-A, B, DR match (the so-called mismatch probability)
3. Waiting time
4. Distance between donor and transplant centre (ischemic factor)
5. National net kidney balance (based on the on-going results over a 365-day period).

Pediatric patients (under 16 years of age) received a special bonus waiting time according to the age at which they first joined the waiting list (see table 1).

Tab. 1: Eurotransplant Kidney Allocation System

Allocation Factors		
<i>Points</i>		
	Min	Max
HLA-A, B, DR Mismatch	0	400
Mismatch Probability	0	100
Waiting Time	0.09 points per day	
Distance Donor / Transplant Centre	0 – 104 – 208 – 300	
National Import / Export Balance	0	200
<i>Extra points</i>		
High Urgency	300 points extra	
Pediatric Patients	double points for sharing of the HLA-antigens with the donor	
0 – 5 years:	1095 extra waiting days i.e. 99 points	
6 – 10 years:	365 extra waiting days i.e. 33 points	
11 – 16 years:	730 extra waiting days i.e. 66 points	

Two adjustments to the new system were made within 6 months of its inception, namely: double HLA mismatch points were assigned to pediatric patients and patients not residing in one of the Eurotransplant countries did not receive points for the allocation factor distance and balance.

Independent of the ETKAS procedure were two programs especially developed for highly immunized patients – the Highly Immunized Trial (HIT) and the Acceptable Mismatch (AM) programmes.^{3, 4} Patients participating in these programs were given priority when a negative cross-match was found. Since January 1, 2002, all HIT-patients were integrated into the AM-programme.

The results obtained during the first 6 years of ETKAS show that it met its objectives and 22.% (n = 3525) of kidney-only transplants were performed with no HLA-A, B, DR mismatches and only 2.2% (n = 356) were performed with five or six mismatches. Excluded are the transplants from the so-called Eurotransplant Senior Program (the old-for-old program) introduced on January 4, 1999. This program gives priority to non-immunized recipients over the age of 65 years when kidneys from donors also over the age of 65 become available, regardless of the HLA-match⁷.

More long-waiting kidney patients, who are defined as patients who have been registered on the waiting list for more than 5 years, were transplanted: 20.8% versus 10% in the pre-ETKAS period. It is interesting to note here that the definition of waiting time is of the utmost importance. On April 5, 2000 the definition changed from the date of registration to the date of first dialysis. Since then, 35.4% of patients transplanted underwent dialysis for more than 5 years. More children have also undergone transplantation – the proportion increased by 10.8% – and the number of highly sensitized patients rose from nearly 2.0% to 3.3% as a result of the AM and HIT programs.

The unacceptable high discrepancies between procurement and transplantation rates -the so-called country balances- between the different Eurotransplant countries have disappeared since the inception of the new system. Of all kidneys, 60.9% were transplanted locally or regionally and 18.8% and 20.3%, were transplanted nationally or internationally, respectively.

The 3-year kidney graft survival rate for patients transplanted under ETKAS was 78% compared with 77% in the pre-ETKAS year. A significant HLA-matching effect was also observed ($p=0.0003$) i.e. 83% in the 0 HLA-A, B, DR mismatched combinations versus 71% in the five and six mismatch groups. It is interesting to note that children transplanted under ETKAS had an 8% better 3-year kidney graft survival (77%) than they did in the pre-ETKAS period (69%).

Conclusion

In general, one can state that in quite a number of countries the allocation of donor organs is primarily based on medical and patient oriented criteria. However, one must admit that sometimes also other organizational and logistical reasons play an important role in the final allocation. For example, "use first locally and use regionally or nationally later" is such a factor, although it might also have medical implications such as prolonging the cold ischemia time which might have an impact on the final outcome of the transplantation. Another relevant factor is the definition of the waiting time, being either the time of registration on the waiting list or time since the date of first dialysis.

The frequently heard statement that all patients are equal and should have equal access to the allocation service is a very precept difficult to achieve in practice. However, the ETKAS has attempted to give patients the greatest possible chance of equity. Indeed, as long as the aims of allocation systems – equity, objectivity, transparency, effectiveness, flexibility, fairness and justice – are reached, the rights and interests of patients will be guaranteed.

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References

1. Smits JMA, De Meester J, Persijn GG, Claas FHJ, Vanrenterghem Y. Long-term results of solid organ transplantation. Report from the Eurotransplant International Foundation. In: Cecka JM, Terasaki PI, eds. Clinical transplants. Los Angeles: UCLA Tissue Typing Laboratory, 1996: 109–127.
2. Vanrenterghem Y, Persijn GG. The implementation of the new Eurotransplant kidney allocation system. Eurotransplant Newsletter 1996; 131: 4.
3. Opelz G. Collaborative transplant study kidney exchange trial for highly sensitized patients. Clinical Transplant 1991; 61–64
4. Claas FH, De Waal LP, Beelen J et al. Transplantation of highly sensitized patients on the basis of acceptable HLA-A and -B mismatches. In: Terasaki P. ed. Clinical Transplants. Los Angeles: UCLA Tissue Typing Laboratory, 1989: 185– 190