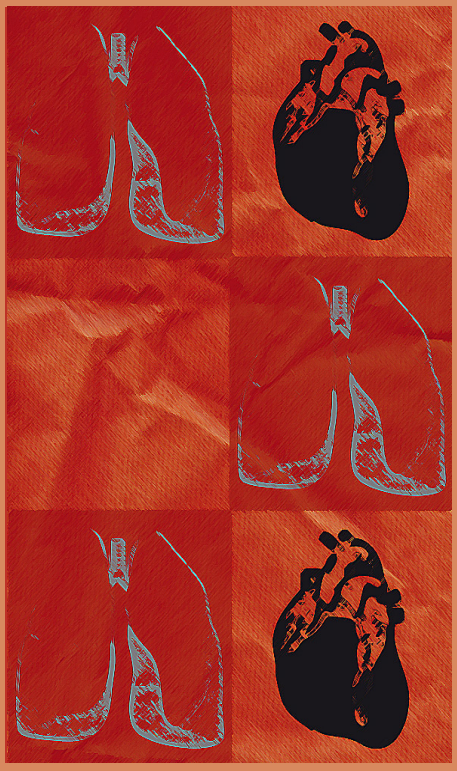
UNESCO Chair in Bioethics

Teaching Ethics in Organ Transplantation and Tissue Donation

Cases and Movies

Silke Schicktanz,
Claudia Wiesemann,
Sabine Wöhlke (Eds.)

In cooperation
with Amnon Carmi



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Prof. Dr. Silke Schicktanz
Prof. Dr. Claudia Wiesemann
Sabine Wöhlke, M.A.
Department of Medical Ethics and History of Medicine
University Medical Center Göttingen, Germany

Prof. Dr. Amnon Carmi
UNESCO Chair in Bioethics
Haifa, Israel
e-mail: acarmi@research.haifa.ac.il

Names of persons and places have been anonymized in order to protect the privacy of the persons involved.

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Part A: Introduction

Silke Schicktanz, Claudia Wiesemann

Organ transplantation is a thrilling new option of modern surgery yielding hope for chronically ill patients, and, at the same time, stirring controversial ethical questions on human identity and the meaning of the human body. Being a global and transnational endeavour, organ transplantation raises universal ethical concerns and, yet, has to be adapted to culturally mediated believes. Case studies are particularly apt to illustrate the range of global and local, ethical, social, and cultural problems associated with this new form of treatment.

The value of case studies for medical ethics teaching has been sufficiently demonstrated. They stimulate ethical debates by calling for a combination of concrete problem solving and abstract principled reasoning. Through case studies, students will learn, firstly, to develop sensitivity for ethical problems and to describe an ethical conflict, secondly, to identify and analyse the underlying ethical principles and values which are relevant to the case and, thirdly, to stimulate ethical decision-making in the practice of health care. Thus, case studies serve as a valuable instrument for health-care ethics education.

We have collected a wide range of cases from different regional, cultural, or religious backgrounds. The cases cover a multitude of topics such as living and post-mortem donation, xenotransplantation, or organ trafficking. For further discussion, each case ends with possible solutions to the problem. In real life, there is often more than one solution to a conflict. Thus, it is important to be able to give good arguments for one's choices. Students should learn how to develop a position on an ethical problem and how to justify it.

To encourage and inform these deliberations, we will give a brief introduction into the ethics of organ transplantation. This does not cover all sorts of ethical problems related to organ transplantation but will provide basic information to start with in class-room discussions. For an in-depth reading we have compiled a list of open-access sources and basic books at the end of this introduction.

1. Definition and medical practice of organ transplantation

Organ transplantation is the surgical replacement of a malfunctioning organ by another human organ. Kidney, heart, pancreas, liver, or lung have already been successfully transplanted, as well as organ parts or tissues such as bones, cornea, skin, or bone marrow. Even the transplantation of several organs at once has been ventured (so-called multi-organ transplantation). More recently, and still rarely, extremities such as hand, arm, or foot, and even a face were transplanted. In general, three types of grafts are distinguished:

1. auto-grafts which originate from the recipients themselves (e.g., in the case of skin or bone transplantation),
2. allo-grafts which are transplants between genetically non-identical humans,
3. xeno-grafts which are living animal organs or tissue transplanted into humans.

Most organ transplantations are of allogenic origin. From dead donors any kind of organ or tissue can be transplanted (so-called cadaveric or post-mortem donation). Kidney, lobes of liver or lung, and bone marrow can be donated by living donors, too.

Life-long immunosuppression in the recipient is a necessary condition for all transplantations between human beings except for monozygotic twins. Thus, the side-effects of these drugs such as infectious diseases or cancer have to be taken into account.

Success rates

The kidney is the most frequently transplanted type of organ. Thanks to modern efficient immunosuppressive drugs, a transplanted kidney can function up to 20 years or longer. Since organ transplantation has entered into medical practice nearly thirty years ago, statistics are available that demonstrate the success of organ transplantation with regard to organ survival and life expectancy of the recipient. The largest data bank for organ transplantation provided by the US Dept. of Health and Human Services[1] shows that 5-year-survival rates for kidneys are fairly good and vary slightly according to living (79%) or post-mortem donation (67%). The 5-year-survival rate in heart transplantation is 71%, for

[1] see http://optn.transplant.hrsa.gov/ <04/02/2010>

liver, it is about 65% (for living as well as post-mortem donation). For lungs, 5-year-survival rates are worse (post-mortem donation 46%, living donation 34%).

Given the good results of organ transplantation, surgeons all over the world deplore an "organ shortage". This means that more patients with organ failure are in need of an organ than organs are available through donation. This raises the ethical question of how to allocate organs. Many Western industrialised countries have established organisations or committees to control the allocation of organs and to allocate them according to just criteria.

2. The ethics of organ and tissue donation

Organ transplantation is a complex modern medical invention. Long-term successful organ transplantation became possible when the first effective immunosuppressive, Ciclosporin, was introduced into medical practice in 1978. Acceptance of organ transplantation by the public was accompanied by a gradual change in mentality, attributing personhood to an isolated region of the body, the brain, and developing an instrumental, mechanistic attitude towards the other body parts. Organ transplantation required a complex interaction of surgery, anaesthesia, neurology, legal medicine, religious, and state authorities that was negotiated in scientific communities, political circles, and the media.

The ethical problems of organ transplantation result from the fact that it is a highly risky and, at the same time, highly beneficial procedure involving questions of personhood, bodily integrity, attitudes towards the dead, and the social and symbolic value of human body parts. Moreover, words in organ transplantation implicitly and, often, uncritically transport ethical meanings. The word "donation", for example, implies that there is a person acting voluntarily to benefit someone else. "Donors", however, can be dead and are no longer able to act. Organs, moreover, are sometimes harvested without the dead "donor's" former consent. In ethical debates, this problem of an adequate wording has to be kept in mind.

However, for the sake of argument, here the donor's and the recipient's perspective will be separated. It will be asked: who could and should give an organ? Who could and should receive an organ?

Post-mortem donors

In most Western industrialised countries the major source for transplanted organs are dead or brain-dead persons, while in countries like Japan or Iran living organ donation prevails. Post-mortal organs can be harvested from brain-dead or non-heart-beating donors. The concept of brain death was discussed in the 1960s after the spread of artificial respiration techniques in intensive care medicine and implemented in clinical practice when heart transplantation increased the need for a new definition of death. Although brain death is not always defined in exactly the same way, it usually means the irreversible damage of the whole human brain (comprising brain stem and neo-cortex). According to various national and international guidelines developed in the late 1960s, the brain-death criterion is adequate to determine the death of a person. Mechanical ventilation allows for the explantation of adequately perfused organs and thus for better survival rates in the recipient. Non-heart-beating donors are another organ source. Some of these are dead patients brought into hospital, sometimes after unsuccessful resuscitation. They can be donors of skin, bones, cornea, or heart valves. Others can be patients on intensive care units with heart failure who, for reasons of futility of treatment, will not be or are unsuccessfully resuscitated and who have agreed (or would presumably not object) to become organ donors. They can be a source of any type of organ or tissue. In these cases, the transplant team will retrieve organs after treatment withdrawal and a waiting time of about 10 minutes after cardiac arrest has occurred.

A major ethical question is related to the role of personal autonomy: Is explicit or implicit informed consent required, or does death annul a person's right to determine what will happen with her body?

Different legal and ethical solutions to this problem have been proposed throughout the world. Some countries have adopted a so called "opt-in" solution. In this case, explicit informed consent by the deceased person before death is required (by carrying an organ donor card, a written statement, a notice in the driver license etc.). Other countries foster a combination of individual consent and proxy consent, the latter being a substitute for the former. This means that family members can ensure the deceased person's will is observed. In contrast, the "opt-out" solution is based on the idea that everyone counts as

potential organ donor and dissenters have to explicitly state their will (e.g., by registering in a data bank, or by personal communication). In both the opt-in and opt-out systems, individuals have the freedom of choice. Yet, in the first case the patient's autonomy is understood as something to be actively enacted that cannot be substituted, whereas the second and third options put more weight on relieving the donor from the responsibility to decide and on the interests of organ recipients. A fourth, albeit rare, position states that dead bodies are no longer subject to personal rights and, thus, implies a right of society to dispose of organs.

Objection to post-mortem donations can, for example, be based on cultural or religious assumptions on how to appropriately handle the human corpse. Some religious authorities of monotheistic religions like Christianity and Islam have accepted brain death as criterion for the death of a human being and have, thus, endorsed organ transplantation. Yet, others deny the right to call a still breathing person dead. Cultural conceptions of death, like in Japan, can contravene scientific convictions. Therefore, every case needs an assessment of the donor's and recipient's cultural and religious attitudes towards brain death and organ donation.

Living donors

Due to these problems, in many countries, donating living organs is seen as an important alternative to cadaveric donation. Depending on legal regulations and cultural attitudes, the frequency of living organ donation ranges from 20% to 90% of all organ donations. Close family members, spouses, friends, or sometimes even strangers are considered as possible living organ donors. While living organ donation largely benefits the recipients, the donors' risks include severe health problems or even death. For the donor, organ removal is a non-therapeutic intervention, and the risks are usually not balanced by direct benefits. With regard to the donor, physicians have to infringe on the ethical rule "First do no harm!" (lat. *primum nil nocere*), passed on in the traditional medical ethos and expressed in the Hippocratic Oath. However, in modern bioethics respect for individual autonomy is often given priority over other moral rules, including the principle of non-maleficence. Hence, one can argue that the wishes of the potential donor to donate should be respected. This, however, points to the problem of how to

ensure free and informed decision-making in organ transplantation. Many people think that love and compassion for a close relative are reasonable motives for a donation. Additionally, from a pragmatic point of view, the chances to improve the quality of life of a close relative add another motive to organ donation because a patient's improved quality of life will have positive effects on the whole of family life. But serious concerns arise from social pressure or even coercion exerted by family members who may oblige a relative to agree to donation. To protect the donor from coercion, a thorough examination of the motives of and relationship between donor and recipient is crucial.

Decision-making can be even more difficult if the potential living donor is a stranger to the recipient. This form of donation is often called "Samaritan donation". The term "Samaritan" in Christian tradition refers to the parable of the good Samaritan who helped a stranger in great distress by an act of charity and kindness and without expecting any personal benefit from it. The donor in this case is motivated solely by altruistic feelings. In practise, the term "Samaritan donation" is used either for altruistic anonymous living donation or when donor and recipient do not know each other well and no financial compensation is involved. However, as Samaritan donations are quite exceptional and might hide other forms of commercial transcation, ethicists argue that motives and competency of the donors have to be thoroughly scrutinized.

Body concepts and personal identity

The transfer of organs, extremities, or a face also raises questions of personal identity. A wide-spread fear raised by the transplantation of organs is that the organ recipient might experience psychological change, or more precisely, that personal characteristics might be transferred from one to the other. The idea of the body as locus and medium of personal identity has cultural as well as medical historical reasons. Early medical efforts to develop tissue and organ transfer in the 19th century went along with the idea of changing the recipient's mind and personality. Today, in lay perceptions, this idea is still present. Especially in art, movies, and literature this topic is often addressed and organ transplantation is as a source of fear – or hope – of changing one's personal identity. This, of course, relates to the meaning of the human body in medical as well as in the respective cultural traditions.

The human body is the physical object of medical interventions. In modern medical practice the human body is mainly seen as a material object – as the locus where the diseases reside and the intervention takes place. The metaphor of the human body as "machine" (in reference to the 17th century French philosopher René Descartes) depicts this attitude. The human body, thus, has no social, or cultural, meaning. In contrast, the essence of the human being, its personality, is located exclusively in the disembodied spirit. However, some bioethicists from different cultural or philosophical backgrounds hold a different perspective. For them, the body is the medium of personality and identity. It is indispensable for personal experience, self-understanding, and perception of the world. Consequently, the transplantation of a body part will change a person's identity – not just in an objective, physiological way, but in the way the recipient perceives and experiences the world. Thus, religious and cultural meanings of particular body parts (such as heart, eyes, gonads, face, etc.) have to be considered in the ethical debate as the patients' believes have an impact on their conception of self and personhood.

This includes ethical questions on how living donors and recipients refer to the transferred organ – do they accept the transfer or do they belief it still belongs to the other (like, e.g., *my* kidney in *your* body?). Such a conviction can have a serious impact on the donor-recipient relationship.

The body is a challenge for traditional bioethical reasoning usually focusing on autonomous individuals because the concept of autonomy relies on the idea of the body as being the object of one's personal discretion. This conception of personal individuality ignores the extent to which one's cultural and personal identity is built upon bodily practices, bodily constitutions, and body images. This shows how important it is to think about the normative meaning of bodily-related social interactions and to respect and care for others' bodily integrity.

Commodification and organ trade

The problems of organ trafficking and illegal organ trade have raised increased awareness among ethicists as well as international organizations. Those who criticize a free market of organs fear that this will seriously increase social injustice. Moreover, based on the concept of human dignity, they challenge the right to sell one's body parts. Others,

however, argue that a ban on organ trade only leads to illicit and thus badly controlled markets. Instead, national and transnational regulations of the organ market would lead to more transparency, help to stop prize dumping, and secure the rights of the vendor. International authorities such as the WHO and UNESCO have expressed concerns about transnational organ trafficking and have set the aim to combat illicit trafficking of organs and tissues[2]. Organ trafficking rests upon complex social networks. Donors often come from poor, developing countries while recipients usually live in rich and highly industrialised countries. Illegal organ trafficking involves so-called brokers dealing in organs as well as surgeons willing to transplant them illegally.

The main types of arguments in favour of commercialization can be grouped around four moral principles: a) *justice*: it is unjust to let people die due to organ scarcity when, in principle, more than enough organs are available, b*) liberty*: personal autonomy implies that one has the right to dispose of one's body as one pleases, c) *beneficence and utility*: commercialization would lead to a win-win situation, both donors and recipients would likewise benefit from it, and d) *efficiency*: a free market will make the system more efficient and solve the problem of demand. At the same time, these tendencies and arguments can be criticized on the basis of nearly the same principles. So it is feared that a) the practice of paying money for organs will increase injustice because only the wealthy will then be able to afford an organ transplantation treatment, b) the autonomy of the poor will in fact be limited due to their lower social status and financial constraints, c) commercial donation will discourage altruistic donors and, consequently, the number of altruistic donations will seriously decrease, and d) a commodification of the human body ignores the existential meaning of the body for personal identity and self-understanding.

Xenotransplantation

Due to the ethical problems of human-to-human donation, scientists are searching for alternative ways of organ replacements such as xenotransplantation. The aim is to produce organs or tissues artificially by using

[2] see World Health Assembly resolution in 2004 http://apps.who.int/gb/ebwha/pdf_files/WHA57/A57_R18-en.pdf; see UNESCO Universal Declaration on Bioethics and Human Rights: http://portal.unesco.org/ <04/02/2010>

sources from other species or cell types. Xenotransplantation is defined as any procedure that involves the transplantation, implantation, or infusion into a human recipient of either live cells, tissues, or organs from a non-human animal source (animal-to-human transplantation). In biomedical research, the most recent approach to xenotransplantation targets the pig as source animal with the goal of transplanting genetically modified solid pig organs such as kidneys, hearts, and livers into humans. In some cases, external (ex vivo) pig liver is used for temporary perfusion to bridge acute liver failure. Other envisioned applications are the use of encapsulated porcine islet cells for diabetes therapy, or the use of fetal porcine neuro-cells for Parkinson cell therapy.

Xenotransplantation research seeks to address three major problems: (1) the immunological rejection of animal tissue and organs is a complex biological response of the human body and can result in non-function of the xenograft. In addition, (2) the physiological and anatomical compatibility of animal organs has to be ensured in order to guarantee organ function over an acceptable period of time. Moreover, (3) the risk of transferring animal pathogens (such as viruses, bacteria, or fungi) from graft to host (so-called xenozoonoses) must be minimized. Most national proposals and international guidelines focus on two factors for risk management: (a) hygienic housing and pathogen controls for the source animals, and (b) pre-operative selection, information gathering, and post-operative monitoring with respect to xeno-patients.[3]

The ethical problems discussed in this field include the balancing of risks and benefits for individuals and society and the question of whether animal rights preclude such a manipulation and instrumentalization of sentient beings. Furthermore, a geopolitical solution is required for the emerging problem of "xeno-tourism", meaning patients undergoing xenotransplantation in countries without regulations or control mechanisms. This increases the danger of xenogenic infections developing into an epidemic and even crossing national borders. New

[3] see: *World Health Organization:*
http://www.who.int/ethics/topics/human_transplant/en/;
http://www.who.int/transplantation/xeno/en/
see: *OECD*
http://www.oecd.org/countrylist/
0,3349,en_2649_34537_1783767_1_1_1_1,00.html <04/02/2010>

pandemics might arise resulting in severe international public health problems.

Further reading

Broyer, Michel; Hors, Jacques; Huault, Gilbert; Kanovitch, Bernard (editors) (2005) Religions monothéistes et greffes d'organes, Editions L'Harmattan, Paris

Carvais, Robert; Sasportes, Maryline; Rachet-Darfeuille, Véronique (editors) (2000) La greffe humaine. (In)certitudes éthiques: du don de soi à la tolérance de l'autre, Presses Universitaires de France, Paris

Cherry, Mark J. (2005) Kidneys for sale by owner – Human organs, transplantation and the market, Georgetown University Press, Washington

de la Vieja López, María Teresa; Velayos, Carmen (editors) (2008) Educación en bioética: donación y trasplante de órganos = Bioethical Education: organ procurement and transplantation, Ediciones Universidad de Salamanca, Salamanca

Fox, Renée C.; Swazey, Judith P. (1992) Spare parts – organ replacement in American Society, Oxford University Press, Oxford

Gafo, Javier (editor) (1996) Trasplantes de órganos: problemas técnicos, éticos y legales, Publicaciones de la Universidad Pontificia Comillas, Madrid

Gutmann, Thomas; Daar, Abdullah S.; Sells, Robert A.; Land, Walter (editors) (2004) Ethical, legal and social issues in organ transplantation, pabst science publisher, Lengerich

Kawaguchi, Hirokazu; Seelmann, Kurt (editors) (2003) Rechtliche und ethische Fragen der Transplantationstechnologie in einem interkulturellen Vergleich, Franz Steiner Verlag, Stuttgart

Lock, Margaret (2001) Twice dead. Organ transplants and the reinvention of death, University of California Press, Berkeley

Moazan, Farhad (2006) Bioethics & Organ Transplantation in a Muslim Society: A Study in Culture, Ethnography, and Religion, Indiana University Press, Bloomington

Morris, Peter (2003) Ethical eye: transplants, Council of Europe, Strasbourg

Rosner, Fred (2001) Biomedical ethics and Jewish Law, KTAV Publishing House, Jersey

Schicktanz, Silke (2002) Organlieferant Tier? Medizin- und tierethische Probleme der Xenotransplantation, Campus, Frankfurt/New York

Schlich, Thomas; Wiesemann, Claudia (editors) (2001) Hirntod. Kulturgeschichte der Todesfeststellung, Suhrkamp Verlag, Berlin

Veatch, Robert (2000) Transplantation Ethics, Georgetown University Press, Washington

Wilkinson, Stephen (2003) Bodies for sale – ethics and exploitation in the human body trade, Routledge, London

Part B: Case studies

I. Case: Living kidney donation – the right to refuse

Mr. A.B.[4] is 57 years old. He is an Arab citizen, married and has three children: a 22-year-old son, a student; a 27-year-old son, married and father of two young children; and a 32-year- old daughter, unmarried.

Mr. A.B. has been suffering from acute chronic renal failure for two years and needs dialysis three to four times a week – nevertheless he is unable to work and live a normal life. For two years he has been living on social welfare.

His three children were medically examined and found to serve as potential kidney donors to their father. The question was: Which of the three children should be chosen as donor? They were sent to the psychologist for a psychological examination of their mental well-being – and the youngest son was diagnosed to be the most resilient for this purpose. However, the psychologist was later informed that the family had decided on choosing the 32-year-old daughter as donor. According to their ethnic background, the daughter as an unmarried female is considered to have an inferior family status. Moreover, the psychologist was informed in a face-to-face talk to her, that her right to refuse had not been considered by the family.

Moshe Zaki, Israel

Please discuss the alternatives and justify your answer!
How should the psychologist respond?

1. The psychologist informs the family and the father that their decision to choose their daughter as donor is ethically respected because it is culturally reasonable.

[4] Names of persons and places have been anonymized in order to protect the privacy of the persons involved.

2. The psychologist pleads for a universal ethical code according to which the family has to respect the individual's right to refuse to be a donor which also applies to their daughter.
3. The psychologist appeals to the local welfare services to offer the daughter legal and social assistance to convince the family not to force her.
4. The psychologist convinces the medical doctors that they should feign serious disease of the daughter which would exclude her as donor because of "medical reasons".

II. Case: Living liver donation and competent decision making

35-year-old Mrs. C.D., mother of a daughter aged six, is a patient of colitis ulcerosa and has developed cirrhosis of the liver as a result of cholangitis. In addition, a carcinoma of the intestine was detected a few years ago which led to the removal of the entire intestine. During the operation a lymph vessel was injured, which is why lymph now flows into her abdomen and has to be pumped off every other day. On account of the bad liver function, doctors advise against an operation and plead for transplantation. However, Mrs. C.D.'s liver function reading is too good for her to become a candidate for urgent transplantation on the waiting list. With no live-in partner to step in, both her mother and her aunt's live-in partner Mr. B. have declared their willingness to function as donors.

For medical reasons (Mrs. C.D.'s mother is obese) the doctor in attendance favors Mr. E.F. as possible donor. Mr. E.F. is 46 years old and currently working as a construction worker, constantly away on a job. As a temporary worker he will have to stop working for some time if becoming a donor (at least three months, totally resting for the first eight weeks) and he may lose his job, which, according to him, he would not mind. Mr. E.F. attended elementary school for eight years.

During the required psychological examination he appeared to have limited intelligence. Other than most patients he has never sought information on living organ donation, either by reading about it or by looking it up on the internet. He completely trusts the doctors and expects full recovery with his liver renewing itself. The impression one gets is that Mr. E.F. has so far not quite realized the risks of the operation (mortality risk for living liver donors is approx. 1%). Neither has he been in a hospital before. Furthermore, he expresses towards the psychologists that Mrs. C.D. presses for something to be done and has pinned all her hopes on Mr. E.F. which he wants to fulfill.

Merve Winter and Oliver Decker, Germany

Please discuss the alternatives and justify your answer!
How should the psychologist respond?

1. The psychologist agrees to Mr. E.F. becoming a donor for Mrs. C.D. as it is Mr. E.F.'s expressed wish.
2. The psychologist rejects Mr. E.F.'s offer of becoming a donor, because the base condition of informed consent is not fulfilled.
3. The psychologist invites Mrs. C.D. as well as other relatives to discuss other alternatives for the donors.
4. The psychologist again discusses the case with the surgeon to convince him that the transplantation should be postponed until Mrs. C.D. be an official patient on the waiting list and has a higher chance as an emergency case to receive a post-mortem liver.

III. Case: Parental living kidney donation

Mrs. G.H. and Mr. I.H., parents of the four- year-old R., are both willing to undergo parental live kidney donation. They have explained that this is "natural" to them; it is a matter of "parental responsibility". Mrs. G.H. has explicitly said that if one has brought a child to this world, one should do what one can for the child's health and well-being. Both parents have also explained that they are more than happy to start the medical test and examination procedure, which will show whether they are medically acceptable as donors.

However, when Mrs. G.H. underwent the procedure, the doctors found that she could not be accepted as donor since she has a cyst on one of her kidneys. For Mrs. G.H., these were "just terrible" news. The medical professionals turned to Mr. I.H. Had he considered parental live kidney donation? Mr. I.H. explained that he really wanted to donate.

Today, however, Mr. I.H. gets the response that he is medically unacceptable as donor because he has rheumatic fever. Mr. I.H. already knows this and he gets upset. He explains that, in his view, it is better that he donate now, while both of his kidneys are ok. They may get destroyed later on in life, he says, and "it is better that my daughter gets one of them, while they're healthy, and she lives." He adds that he thinks he has the right to decide on his own what happens to his body.

The ethical committee and physician involved are unsure how to decide as the surgeons do not want to harm the donor which means exposing the father to serious health risks. On the other hand the parents insist in their "parental responsibility".

Kristin Zeiler, Sweden

Please discuss the alternatives and justify your answer!
How should the doctor respond?

1. The doctor rejects Mrs.G.H. and Mr. I.H.'s offer of becoming donors, because the risk in the future is too high.
2. The doctor agrees to Mr. I.H. becoming a donor for his child, because of Mr. I.H.'s expressed decision to give his life for the life of his daughter.

3. The parents should reconsider what they mean by "parental responsibility" and how this risk will also affect their daughter psychologically. The transplantation will be postponed and the father will not be allowed to donate, because his ability to make an autonomous decision seems to be seriously weakened by an overstated understanding of "parental responsibility".

IV. Case: Living liver donation – the right to refuse

K.L. is a nine-year-old girl. She was referred to the paediatric clinic with symptoms of acute hepatic failure. The clinical signs suggest that she might be suffering from Morbus Wilson which has not been diagnosed so far since she was asymptomatic and perfectly healthy until now. However, she was initially treated for influenzal infection, and then suddenly had fallen into a coma due to acute and irreversible liver failure. The patient also developed renal failure being already anuric due to a hepatorenal syndrome. Her condition has actually become so severe that liver transplantation turns out to be the only available therapy. The parents are spontaneously willing to donate a part of their liver. However, the computed tomography reveals that only the mother can donate due to size match and anatomical reasons. During the preoperative interview, she has to be informed about the possible risk of major surgical complications and the unlikely worst-case scenario of even dying due to hepatic failure related to the procedure (<0.5 mortality risk, post-operative complications in about 40% of donors; serious complications (i.e. lasting disability or death) occurs in up to 5% of post-operative complications). This, quite unexpectedly to herself, causes a major conflict because of her own history: when she was ten years old, her own mother had to undergo liver surgery because of a haemangioma and did not survive the intervention. She therefore grew up as a half-orphan. She is now afraid that she might not survive partial liver donation and that her daughter would have to grow up without her mother. Moreover, she fears that in this worst case her daughter would be affected by the knowledge that the operation rescuing her own life had cost her mother's life. She is reluctant to consent to the surgical procedure.

Gabriele Werner-Felmayer, Manuel Maglione and Gerald Brandacher, Austria

Please discuss the alternatives and justify your answer!
How should the surgeon proceed?

1. The surgeon informs the mother about the improvement in surgical techniques in the last 20 years as well as about the donor's and recipient's outcome in the planned procedure. He explains that in a renowned transplant center like the one where she and her daughter are being treated, complications with fatal outcome for donors are most unlikely (the overall statistics show <0.5% mortality; moreover, the clinic has a reputation as an excellent hepatobiliary and transplantation center with about ten living-donor liver transplantations per year and a high number of liver resections in which so far none of the donors have died).
2. The surgeon explains the alternative to living liver donation: the daughter could be listed as a top priority recipient which would ensure post-mortem donor transplantation. Yet, the time frame and the chance to receive an organ of appropriate size and quality are uncertain because no brain-death donor is at the moment available. Certainly, because of the daughter's medical condition, her chances of survival would be much higher in case of a living liver donation as this would save valuable time in the limited span available for intervention.
3. The surgeon explains that other relatives could donate. This, however, would be a time-consuming procedure with the possibility that no suitable donor will easily be found among them.
4. After having informed the parents about all the facts mentioned in points 1-3, the surgeon suggests to take a break giving them a chance to discuss and reconsider the situation either alone, or, if they wish, together with a psychologist. He also suggests to register the daughter for deceased donor transplantation immediately as a back-up in case the mother wants to refuse donation.

V. Case: Living organ donation – legal limits to non-family related donations

In Martínez, near Buenos Aires, Mrs. M.O. required judicial authorization for an ablation of kidney to be performed on her, to implant it in Mr. N.P. As the two were not relatives, the national Law of Transplants requires a court decision.

Mr. N.P. is on the waiting list because of chronic terminal kidney failure. He needs three sessions of dialysis per week. The only recommended therapy is renal transplant. Statistics show a 20% mortality rate for patients with his condition on dialysis, and 2% for those with renal transplant. A living donor was preferred by Mr. N.P. because thousands of patients are on higher up on the waiting list than he. Furthermore, the medical outcome is generally considered better and surgery could be better planned and performed.

All witness declarations show that Mrs. M.O. was moved by altruism, her father having died of renal failure. Her husband and children agree, too, and Cross-match is good. Mr. N.P. has no relatives to donate a kidney.

Both families are middle class, with no economic needs, and a high educational level. Donor and recipient are normally competent. Mrs. M.O. and Mr. N.P. know each other from a social project which helps to develop rural schools. During the hearing in court the judge seems to be convinced by the altruistic motives of donor and recipient. However, the district attorney appeals, arguing that Mr. N.P.'s death is not imminent; and he could go on with dialysis without severe health damage. Furthermore, transplants might fail and the ablation diminishes the donor's health. Thus, extreme exceptional circumstances as required by the law to accept a living donor transplant are not applicable, according to the attorney's argumentation.

Ricardo Rabinovich-Berkman, Argentina

Please discuss the alternatives and justify your answer!
How should the judge respond?

1. The judge agrees to Mrs. M.O. becoming a donor for Mr. N.P. as she has altruistic motives and is informed about the risks.
2. The judge rejects Mrs. M.O.'s offer of becoming a donor because there are limitations to the free will to donate a kidney. The state has a right to interfere with the decision of a competent adult person.
3. The judge argues that the concept of an "extreme situation" required by the law to accept a living donor, does not only involve imminent death, but also significant improvement in the recipient's quality of life.
4. The judge rejects the non-family related donation because he doubts Mrs. M.O.'s altruistic motivation.

VI. Case: Organ transplantation – mentally incompetent recipients

Mrs. R.S. is a patient who has been detained in a psychiatric hospital on account of a severe depression which amounts to a mental illness. She also has failing kidneys and will die imminently in the absence of a transplant. Not surprisingly perhaps, Mrs. R.S. won't give her consent to the transplantation and she has also expressed the view that transplants are morally unacceptable. If a person has a severe depression, the decision he or she makes about life-saving treatment may not be a true decision but one that results from the illness. It could be that Mrs. R.S. has not weighed factors that she would consider if mentally well, and so the balancing act that would normally be followed by a person weighing the risks and potential benefits of a transplant has been infected by the depressive illness.

The doctor is unsure whether the decision to accept or reject a transplant belongs to Mrs. R.S. and whether Mrs. R.S. is entitled to consider that the risks of the process do not outweigh the potential benefits.

Kris Gledhill, New Zealand

Please discuss the alternatives and justify your answer!
How would you approach the ethical questions?

1. Mrs. R.S. should be given a life-saving transplant because there is a duty of care arising from the need to treat the depressive illness – if the refusal to accept the transplant is a symptom or consequence of the depressive illness, then the transplant may be seen as directly linked with the treatment for the mental illness given the importance of the issues involved (death if there is no transplant despite the intrusive nature of the operation).
2. As it is most important that there is a solid decision making procedure that allows the patient's viewpoint to be represented, a court will be involved to make a final decision.
3. The refusal of Mrs. R.S. is accepted because, even if the patient may not approach the matter by carrying out a cost-benefit analysis, she holds the view that transplants are wrong on moral

grounds. If it is the patient's lot to die, that is something the doctor should accept. The fact that the patient is mentally ill at the time he or she has to make the decision does not alter the starting point, namely the presumption that the person can make his or her own decision and that this decision should be accepted.

VII. Case: Living organ transplantation: cross-national donors

Mr. T.W., aged 40, has been on regular dialysis treatment for some years. Although Mr. T.W.'s quality of life is not fantastic, he has been receiving continuous medical care and encouragement by Dr. U.V. However, Mr. T.W.'s situation is urgent and his health is now quickly deteriorating. He will not survive unless he receives a new kidney within one month. He is on the national waiting list. Yet, it is questionable whether he will receive a suitable organ in the near future. None of Mr. T.W.'s family members are suitable for donating a kidney.

Dr. U.V. knows about the opportunity to receive living organ transplantation in some of the neighboring countries. Although he does not request it, he still receives information about the availability and quality of organ transplantation in different health care institutes there. However, he also understands that the donors in these countries are mainly poor and vulnerable people. They agree to sacrifice their kidneys for relatively minor amounts of money. Actually, they usually do not receive proper health care after the surgical operations removing their kidneys, and their lives are actually not improved by such financial reward. Dr. U.V. firmly believes that he should not advise his patients to receive transplantation there so as not to exploit these people.

The family members ask Dr. U.V. whether he would be able to recommend a reliable source in the neighboring countries so that they can contact them and go there for transplantation in a timely manner. If not, they would have to rely on brokers to introduce a foreign health care institute for such a purpose. Dr. U.V. knows clearly that a lot of brokers are not reliable regarding the quality and safety of the surgical operations and the organs.

Chang-fa Lo, Taiwan

Please discuss the alternatives and justify your answer!
How should the doctor respond?

1. Dr. U.V. informs the family about the international ban on organ trade and social and ethical problems concerning donation in the neighboring countries (esp. that donors are from poor family sacrificing themselves).
2. Dr. U.V. gives the family some basic objective information (outcome, risks, advantages) about clinical centers in neighboring countries because he fears health risks for his patient if the transplantation should be organized by brokers.
3. Dr. U.V. informs the family that he is not willing to treat consequent health risks and provide follow-up medical surveillance of the patient if they go for illegal or unethical ways to "organize" an organ.
4. Dr. U.V. stresses the alternative of living kidney donation and suggests the family re-decide who might be potential donor.

VIII. Case: Living organ donation – legal restrictions on donor-recipient-relationship

Patient Mr. X.Z. is 59 years old and married. He has been suffering from chronic renal failure for many years. The patient applied to the Center of Transplantation of Kutaissi (Georgia) to receive kidney transplantation. According to the assessment of the patient's mother and wife, the surgeon refuses to use them as donors, because they both show incompatible blood groups.

The patient's general condition has deteriorated, and it is necessary to transplant a kidney immediately, as otherwise the patient will die soon. Unfortunately, the patient has neither father nor siblings alive and only his sister in law confirms that she is ready to donate one of her kidneys to the patient Mr. G.B.

However, according to the recent Georgian Law of Transplantation (GTL), the wife's sister does not fit into the legally required category of being closely related or married to the recipient.

Irma Manjavidze, Georgia

Please discuss the alternatives and justify your answer!
What will be suggestion on this case?

1. The Center of Transplantation of Georgia appeals to the parliament to make changes in the GLT to allow the family a genetically un-related donation.
2. The surgeon discusses the medical emergency with colleagues and after getting support from them he decides to transplant the organ.
3. The family is informed about the legal obstacles and the physician recommends looking for another potential candidate within the family.

IX. Case: Samaritan donation – risk assessment and non-maleficence

A 41-year-old living "Samaritan" kidney donor, who donated one of his kidneys half a year ago to an anonymous kidney patient, first on the waiting list, contacts the transplantation center for a second time: he also wants to give part of his liver. The center is startled by this idea and refers him to the regular screening procedures. A special social and psychological assessment is in place for all Samaritan donations. The outcome of this assessment is that this potential living liver donor does not suffer from any psychiatric disorders or any psychological condition that would obstruct decision making or make his wish flawed. The patient is well-informed about the procedure, its risks and complications, and capable to make this decision.

Medard Hilhorst, The Netherlands

Please discuss the alternatives and justify your answer!
How should the transplantation team decide?

1. The transplantation team carries out the transplantation and fulfills the donor's wish.
2. The surgeon is concerned whether the psychological screening, even if it is done well, sufficiently assesses the patient's condition and whether the patient is autonomous in the full sense of the word.
3. The surgeon refuses the living kidney donation because of paternalistic reasons, as he is convinced to know better what is good for the potential donor than the donor himself.

X. Case: Samaritan donation – domino-paired issue of justice

When a potential Samaritan living kidney donor is accepted for donation, after medical and psychological screenings, several options for allocation are possible. Firstly, the transplantation center offers the kidney to the national waiting list, and the patient who is highest on the list will get it. Secondly, the center asks the donor whether he himself know someone who needs it and in that case the kidneys can be given to this known recipient. Thirdly, there is a so-called domino-paired option. This refers to the case of couples, where one spouse wants to give a kidney to their partner, but immunological mismatch does not allow this option. The center can now ask the Samaritan donor to give his kidney to one of these couples (anonymously), and ask the willing non-matching partner to donate his/her kidney in turn to the waiting list.

In our case the center has a strong preference for this last option, because one can thus accomplish two transplantations instead of one (and sometimes even three, which explains the "domino"-aspect). However, the ethics consultant calls for reflection. Current Dutch policy does not allow a non-matching healthy partner giving his/her living kidney to the waiting list only on the condition that, in return, his/her sick partner will receive a suitable (post-mortem) kidney (a so-called living-list exchange donation). The current restriction is supposed to ensure justice: a rather "regular" kidney will then be given to the waiting list, whereas a more rare (blood and tissue type) post-mortem kidney will be given in return. All patients on the waiting list with a rare blood and tissue type should be treated equally.

Medard Hilhorst, The Netherlands

Please discuss the alternatives and justify your answer!
How should the center decide?

1. The living list exchange including domino-transplantation is unfair. Thus, the Samaritan donor's kidney should be offered to the general waiting list.
2. The Samaritan case is different from the case which is currently not allowed under Dutch policy.
3. The decision is left to the Samaritan donor which of the three options he prefers.

XI. Case: Living kidney donation – psychological and cognitive restrictions of the donor

A 55-year-old single male comes for medical and psychological evaluation for donation of a living kidney to his 54-year-old "brother". As the recipient has no genetic relation to the donor, this case has to be classified as unrelated directed altruistic organ donation. The recipient's mother raised the donor from the age of four along with her 11 biological children. The donor reports his parents could not afford to raise him and he was "given away" to the recipient's mother (adoption status is unclear). The donor has continuously resided with the recipient's 76-year-old mother in the house in which he grew up. The donor has worked for the recipient for the past 13 years cleaning and waxing floors. He worked miscellaneous jobs prior to that, such as yard and janitorial services. Although the donor has never had a bank account, loans or credit cards, he handles his own finances. He has never had a driver's license or automobile, and thus relies on one of his 11 "adoptive" brothers or sisters for transportation. The donor has earned a high school diploma and his intellectual capacity appears equivalent to his educational background. He has never been married and has no children. The donor explains his motivation to offer an organ to the recipient, "because I've known him since childhood," and "because he's nice most of the time." The donor indicates he understands the risks inherent in living kidney donation and is aware that information provided during the evaluation is confidential. He acknowledges awareness of being able to opt-out of donation prior to nephrectomy with confidentiality being maintained. The donor states he is aware of alternative treatments available to the recipient. The Kidney Transplant Selection Committee has reviewed the case and is tied at 50% in favor of accepting and 50% in favor of declining the donor.

John R. Crossfield and Christine I. Rodriguez, USA

Please discuss the alternatives and justify your answer!
How should the Selection Committee decide?

1. Accept the donor because he verbalized understanding of informed consent and signed the required informed consent forms. The donor reports he is able to meet informed consent requirements as defined above. Although the donor is biologically unrelated to the recipient, he has been raised with the recipient's family since his youth.
2. Reject the donor due to psychosocial concerns because of his financial and functional dependence upon the recipient and the adoptive mother and siblings. There is a strong probability that family dynamics would be negatively affected should the donor opt-out without medical contraindication. Furthermore, the donor is vulnerable to manipulation due to his subjugated status in this blended family cluster.
3. Reject the donation because the donor is financially dependent upon the recipient. Because the donor is employed by the recipient, potential financial consequences may influence his decision to donate.
4. Reject the donor and suggest asking the ten biologically related siblings if one of them would consider undergoing evaluation for donation.

XII. Case: Living organ donation – socio-economic relationship between donor and recipient

Mrs. Y.A.'s renal function was rapidly deteriorating and she felt that the search for a donor was taking too long. Her family's chauffeur learned of her predicament and took pity on her. He observed that she slowly began to despair. Without being asked, the chauffeur decided to offer one of his kidneys. The chauffeur, his wife and two teenaged children are living in a small house that was erected by Mrs. Y.A.'s family for their household help. The house is situated in the same compound where also Mrs. Y.A.'s family is living. The offer was accepted by Mrs. Y.A. as well as by the physician. However, before the transplant can be done, the Ethics Committee has to approve. Since there was a requirement that all living donors have to be related to the organ recipients, the chauffeur is proposed to the Ethics Committee as an emotionally related donor who was part of an "extended family."

Leonardo Castro, Singapore

Please discuss the alternatives and justify your answer!
How should the Ethics Committee decide?

1. The hospital's Transplant Ethics Committee allows the donation because the chauffeur seems to be emotionally related.
2. The hospital's Transplant Ethics Committee rejects the donation because the chauffeur rather seems to be financially dependent on Mrs. Y.A.'s family.

XIII. Case: Living organ donation – limits of donor autonomy

Mrs. B.C. is a young woman in her twenties seeking to donate part of her liver to her baby, who is slightly less than one year of age and will need a liver transplant soon. The woman resides with her baby and spouse. Mrs. B.C. was very happy that she could carry this baby full term but now tells the transplantation team that she is devastated to learn that a life-saving liver transplant is needed. She is not sure she could emotionally survive what lay ahead. Her husband, while physically present and helpful with specific tasks, is described as being emotionally hostile. Family supports are skimpy, with a maternal relative reportedly planning to be involved but never appearing at office appointments.

The donor team asks her to be evaluated by Liaison Psychiatry. During the psychological tests the psychologists discover that the potential donor's history was marked by physical and emotional abuse and a series of significant and painful losses. These included removal in early childhood from her biological parental home (due to stated abuse); death of a sibling at birth; physical abuse in her teens by a stepmother resulting in her leaving home to live wherever she could find safe haven, and the loss of three or more babies through planned or spontaneous abortion.

Their report stated that while Mrs. B.C. had sustained a major depressive disorder in the past, at present it is in remission. All members of the transplant team are concerned about her struggle to comprehend and internalize the complex medical regimen for her daughter and the demands on a living liver donor.

She is judged to have decision-making capacity, but a very simple grasp of medical, surgical and follow-up care needs. Nonetheless she has demonstrated that she loves and tries to take good care of her child. It is felt that she will need much team supervision, teaching and support, all within the setting of past and present emotional chaos, and the pain of the liver donation surgery.

John Schumann, Sondra E. Cohen, USA

Please discuss the alternatives and justify your answer!
How should the transplant team respond?

1. The transplantation team moves ahead with the transplantation because Mrs. B.C. has understood the medical and practical consequences of the transplantation and is consenting. The survival of the baby is also in her major interest.
2. The transplantation team rejects Mrs. B.C. as potential donor because of the potential risks of Mrs. B.C.'s lack of social and emotional support. They suggest looking for a deceased donation.
3. The transplantation team rejects Mrs. B.C. as a donor and approaches the husband to ask whether he is willing to donate a part of his liver.

XIV. Case: Living bone transplant – informed consent for donation

Mr. D.E. is 48 years old, and about to receive his first hip prosthesis on indication of arthritis. He attends a pre-surgical consultation accompanied by his wife in an EU country. Mr. D.E. is a likely candidate to donate bone for allogenic transplantation. According to the EU Tissue Directive, the doctor is required to obtain informed consent, to take serological tests, and ask the donor about sexual history to establish the risk of infection. When asked, the patient immediately says, "Yes! I hadn't planned to take the bone home to the dog". When the doctor tries to explain that donation implies testing and questioning, the patient wants to get on with what is relevant for his operation and interrupts the doctor saying, "I trust you, just tell me where to sign". Furthermore, he thinks the questions and tests which, e.g., will reveal his HIV status are only related to his operation.

Klaus Hoeyer, Denmark

Please discuss the alternatives and justify your answer!
How does the doctor handle the feed-back issue of test results?

1. When the donor refuses to listen, the doctor decides not to complete the donation because of lack of adequate consent.
2. The doctor thinks that the donor's expressed willingness to donate is more important than being informed and continues the questioning and testing. He leaves it to the bone bank to handle potential feed back on positive testing.
3. The doctor continues as in 2), but makes a note to the bone bank that the donor shall *not* be informed in case of any tests turning out positive because the donor did not understand this implication.
4. The doctor procures the samples and questionnaire data and at the end of consultation informs the patient that positive test results will be communicated to him.

XV. Case: Bone marrow transplantation – mentally incompetent donor

Mrs. F.G. suffered a severe brain injury in a road crash and resides permanently in a care home. She is regularly visited by her family and it is clear that she is very happy with these visits. Her brother is a constant visitor. He has been diagnosed with a condition that can be treated only by way of a bone marrow transplant, and Mrs. F.G. is almost certain to be a match. She cannot, however, give her consent to donate bone marrow, as her brain injury is such that she cannot make a decision and would not understand what was being done.

However, the family asks the doctor, "Does that mean that she cannot be a bone marrow donor?" "What account is to be taken of the benefit she enjoys from visits from her brother?"

Kris Gledhill, New Zealand

Please discuss the alternatives and justify your answer!
How should the doctor decide?

1. The donation should be performed because there is a benefit to Mrs. F.G., too. She preserves the life of one of her visitors and the risks of bone marrow donation are much lower than the risks of an organ donation.
2. The donation should be performed because it cannot be assumed that someone who has no capacity to make their own decision is thereby deprived of being altruistic: it merely means that an alternative process of decision-making has to be adopted.
3. The donation should not be performed because there is (even a minor) health risk to Mrs. F.G. and a donation is not in her best interest, as she is not the recipient of necessary treatment.

XVI. Case: Post-mortem organ donation – cultural aspects of death and burial traditions

Mr. H.I. is a 56-year-old Muslim man, married and has three children, all under the age of ten. He is without any significant past medical history. Mr. H.I. is motor biking across the country when he is involved in a high speed accident with an oncoming vehicle. Though wearing a helmet, he sustains severe injuries to his head, neck and cervical spine.

He is rushed to a local Emergency Department and is stabilized on a respirator, although in an unresponsive coma. Consultation by three different neurologists on separate days results in a consensus diagnosis of brain death.

His wife and children are identified and contacted. They arrive days later from another state and are informed of his diagnosis. Although the physicians explain the definition of brain death and how it is confirmed, the family refuses to accept that he is dead because he seems to be breathing and his hands occasionally twitch.

The wife expresses a fear to a social worker that the hospital wants to take her husband's organs. After speaking with relatives who are physicians, she is somewhat persuaded that her husband is no longer alive. However, she expresses concern about how his body will be handled and whether it will be kept in the hospital too long for a proper burial.

Omar Sultan Haque, Harold Bursztajn and Abi Gopal, USA

Please discuss the alternatives and justify your answer!
How should the physicians proceed?

1. The physicians again invite the wife for consulting and referring to medical literature explain to her that her husband is dead – and a quick decision about organ donation has to be made.
2. The physicians respect the fears and concerns of the family and wife and stop asking her about organ donation. They suggest stopping the heart-lung-machine to quickly allow for a proper burial.

3. The physicians consult a local Muslim authority who is in favor of organ transplantation and try to convince the wife that organ donation is in accordance with Islamic rules for burial.

XVII. Case: Brain death – consent procedure

A 44-year-old female patient with spontaneous subarachnoid haemorrhage was admitted to hospital with suspected brain death. Brain death is diagnosed according to the legal criteria. The patient is not registered in the national registry of persons objecting to organ removal, (the country's transplantation law is based on the presumed consent principle; a person, refusing organ removal after death, has the opportunity to be registered in a national registry during his/her life. The doctors are obliged to inform relatives about intended organ removal for transplantation). The transplantation coordinator informs the doctors that the patient could become a heart donor.

The doctors meet the husband, son and parents of the brain-dead patient, informing them that the death of the patient has been confirmed and they are considering organ removal for heart transplantation to an urgent patient. The husband objects to organ transplantation, but without giving reasons. The other relatives do not express any opinions, as they did not know the patient's opinion on organ transplantation during her life. The doctors contact the family repeatedly and explain the generosity, solidarity and benefit of organ donation. However, the husband continually refuses organ donation, although other relatives agree with the donation.

The physicians discuss whether to remove organs from the patient, facing the dilemma of benefit (organ donation) and damage for the transplantation program (negative publicity) under moral uncertainty concerning the patient's attitude to organ donation (the opting-out principle is not well known to the public).

Vaclav Zvonicek and Josef Kuře, Czech Republic

Please discuss the alternatives and justify your answer!
How should the doctors proceed?

1. The doctors proceed with the removal of the organs because the legal conditions are fulfilled (no expressed objection) and there are many benefits for other patients waiting for an organ.
2. The doctors respect the husband's attitude because he knows best the patient and her interest.
3. The doctors ignore the husband's objection because he does not provide any good reasons and seems to act irrationally.
4. The doctors fear negative publicity for their transplantation center which will also harm other patients if the number of organ donations decreases because of the negative news paper reports.

XVIII. Case: Post-mortem organ donation and religious conflicts I

Famous police chief Mr. K.L.'s nephew P.N., 17 years old, is diagnosed brain dead. He was shot in the head by purse-snatchers. The organ transplantation committee talks with his family and asks for consent regarding transplantation of his organs. Mr. K.L.'s brother was liver transplanted a long time ago so the family does not hesitate and gives consent for organ transplantation. However, the family consults with the former president of the Department of Religious Affairs whether there might be a problem in respect of religion. The answer is that the "Department of Religious Affairs decided that organ donation is virtue." Then, the family signs the papers giving permission for organ donation. Patients, who were suitable for organ transplantation are informed and five patients on the transplantation list joyfully come to hospital.

In this process, Mr. K.L. by chance met the theologian Mr. O.N., who prepares and presents a TV program discussing different religious opinions. Mr. O.N. says, "Organ donation is not religiously permissible. I neither donate nor accept!" The family gets confused because of this answer faceing a moral dilemma and gives up the idea of organ donation. The patients who are waiting for organ transplantations are expressing their disappointment and fear of dying if there won't be a chance for organ transplantation.

Berna Arda and Ahmet Acıduman, Turkey

Please discuss the alternatives and justify your answer!
How should the family proceed?

1. The family considers their own past benefit (the brother has profited from organ donation) and the potential benefit for the other patients. Thus, they ignore the second opinion of the theologian because he does not seem to hold an official opinion.
2. The family gives up the idea of organ donation because they don't want to get into conflict with religious rules.
3. The family seeks for a third religious authority which should finally decide what is the right decision.

XIX. Case: Post-mortem organ donation and religious conflicts II – follow the law or avoid a scandal?

A young woman aged 28 dies in the hospital emergency room, after having suffered a sudden myocardial infarction at home. She comes from a family of strict orthodox protestant tradition. Because of their religious belief, the family's attitude towards organ donation is rather negative. However, when the intensive care physician consults the National Donor Registry (as is mandatory in such situations according to Dutch law), it is found that the woman is registered as an organ donor. Under Dutch law, the explicit will of the deceased should be followed and the next of kin do not have a legal right to overrule this. The next of kin (parents and sister), who are present in the hospital, are consulted, and – although they express themselves to be very reluctant to organ donation because of religious reasons – finally, after lengthy deliberation, assent to donation of only the heart valves, since the heart is not suitable for transplantation. They had consulted the vicar of their church, who told them that whole organs cannot be removed since the Bible teaches that the body should be buried intact. However, they agree to the donation of the heart valves. When the family comes to the morgue to make arrangements for the final farewell ceremony (at their home) and the burial, only then do they learn that, to retrieve the heart valves, the whole heart has been explanted and sent to the valve bank. The family seems to resign to the situation, but the vicar protests vehemently and demands that the donation should be undone, as, otherwise, he will raise a public protest and contact several newspapers.

Michael Bos, The Netherlands

Please discuss the alternatives and justify your answer!
How should the hospital staff proceed?

1. The hospital staff proceeds with the valves donation as it is in line with the legal requirements and is also in accordance with the patients' will.
2. The hospital staff decides to avoid negative publicity and thus orders the heart back, after the valves have been removed by the valve bank, to be buried together with the body.

3. The hospital staff invites other orthodox protestant authorities to discuss the harm for future patients as well as the ethical problem of ignoring a patient's will.

XX. Case: Definition of death and cultural aspects – family's role

Mr. R.S. is 40 years old; a countryman who has never seen a doctor before. He was diagnosed with brain glioblastoma, a most malignant tumor. Despite two surgeries the tumor continued to grow and rapidly caused organic damage to the brain. The patient's brain was practically dead and he was in a comatose condition. The surgeon informed the family about the bad prognosis and that he wanted to follow brain death criteria to stop any needless treatment.

However, the patient's eldest brother insisted on continuing the treatment. He explained, "If you distinguish five senses, I distinguish six and call it the sixth sense. I sometimes have a presentiment of certain things, events and they come true. Sometimes I feel the presence of people who are at that moment in another place. For my brother these abilities have been very developed. And I have the sensation that he still feels what we do even though he is unconscious. I would ask you not to condemn us but to continue the treatment and not to give up your efforts."

Kyrgyzes, the ancient nomadic people in Central Asia, lived on livestock breeding. Because of a caring and considerate attitude towards nature, they migrated to preserve pasture. The nomadic economy, frequent migration, taking care of big herds of sheep and horses, and hunting were purely male work demanding high physical and moral skills and thus putting men in a higher position in the economy. Men had an important social role in showing filial piety towards their parents and protecting the family and tribe from hostile tribes' attacks. Consequently, the high position of men in production and their social role in society also results in a high position in the family, establishing a patriarchal-patrimonial relations and ideology. The father or eldest sons are responsible for the well-being of each family member and for making any final decision.

Kyrgyz moral values are based on Tengrianism which is an ancient pre-Islamic belief. This particularly includes the cult of the dead and ancestors, which is based on the belief of "life after death". The well-being of a dead person's spirit depends on how his off-spring care for them in real life, commemorate them and perform magnificent funeral ceremonies and build tombs. If they do this, according to this belief,

the spirit is satisfied and protects all relatives. If not, it becomes an enemy and harms the family.

Thus, to offend the dead's and ancestors' spirits is the worst sin for Kyrgyzes. Nobody would dare to raise a hand against a person still breathing, whom modern medicine considers dead, judging by brain death criteria. These cultural traditions are still much stronger, than the traditions of Islam.

Tamara Kudaibergenova and Buranbek Diusheev, Kyrgyzstan

Please discuss the alternatives and justify your answer!
How should the surgeon respond?

1. The surgeon informs the eldest brother that from a medical point of view a continuing of treatment is futile because the patient's brain is practically dead. Yet, the brother denies consent. However, following brain death criteria, the surgeon stops any further treatment and risks to violate the traditional cultural family values.
2. The surgeon informs the eldest brother that from a medical point of view the continuing of treatment is futile because the patient's brain is practically dead. Because the relatives do not consent to stop the machines he, however, respects the traditional cultural values and continues the treatment but wastes time, energy and limited medical resources for several weeks until the brain dead body totally collapses and the machines can be stopped.

XXI. Case: Conscientious objection of physicians

Mrs. T.U. is a 65-year-old woman, born in Algeria and now lives in Spain as an immigrant. Her sons found her unconscious on the floor of her house. She was stabilized and intubated by an emergency physician and then transferred to a Tertiary Care Hospital. Arriving at the emergency room, Mrs. T.U. was in a coma, with hypotension, anisocoric pupils and a score of five in the Glasgow score. A computer tomographic scan has shown a big intracranial haemorrhage in the right hemisphere, with ventricular invasion and deviation of the middle line. The patient was sent to the intensive care unit, where she remained unconscious and progressively deteriorated. After 17 hours, the clinical exploration showed she was brain dead. After the confirmation six hours later, Mrs. T.U. was considered a candidate for organ donation. This was the moment when the physician in charge declared he conscientiously objects and will not follow the procedure of donation, because he does not belief in the medical criteria to determine brain death and thereby the death of a person. Confronted with this situation, the chief of the intensive care unit decides to ask the Ethics Committee of the hospital if this conscientious objection should be respected or not.

Diego Gracia, Spain

Please discuss the alternatives and justify your answer!
How should the Ethics Committee respond?

1. The ethics committee accepts the physician's conscientious decision because he is the person in charge.
2. The ethics committee decides that the physician has the duty to maintain the dead body of the patient in physiological conditions until it is transferred to another physician.
3. The ethics committee decides that it is necessary to contact the patient's sons as soon as possible and to ask them about the patient's presumed will with respect to organ donation and end of life decisions. Only the patient's will should be taken into account. If the patient wants to be organ donor the responsibility for the woman should be taken over by another physician.

XXII. Case: Directed (post-mortem) donation – role of preferences for allocation

A patient, aged 58, terminally ill, is willing to donate his organs – suitable for transplantation – after his death. He wishes to give one of his kidneys to a beloved niece of his while the other organs could be given to any other patient. He asks his hospital physician to make this possible. The physician agrees because she understands his wish as reasonable and easily sympathizes with it. After the conversation, however, she finds out that the wish is illegal: The national law only allows directed living donations where the organ donations are given to those the donor knows personally while directed post-mortem donations are prohibited. Thus, she informs her patient about the legal restrictions. The patient does not want to accept this and responds that in this case, he won't donate any of his organs. What should the doctor do?

Medard Hilhorst, The Netherlands

Please discuss the alternatives and justify your answer!
How should the doctor decide?

1. The doctor respects the patient's wish and acts accordingly by giving one kidney to the niece, and offering the other organs to the waiting list.
2. The doctor refuses to do so while she knows that this also means losing all organs.
3. The doctor contacts the niece and asks her about her opinion and whether a living donation before the patient's death would be a solution.
4. The doctor presents the case to the national health ministry with a proposal to change the law and allow directed post-mortem donations, too, because she thinks it is inconsistent to allow directed donation only in living organ donation.
5. The doctor promises the patient that she will take care of the kidney for his niece but after his death she offers all organs to the waiting list in accordance with the legal regulation.

XXIII. Case: Heart-lung-transplantation – assessing high risks

Mrs. V.X. is 20 years old. She is suffering from pulmonary hypertension and has a hole in her heart. She has been on the waiting list for a heart donation for more than two years. A heart was eventually acquired from a 24-year-old accident victim. The transplantation team decides to additionally perform a second organ (lungs) transplant on her which they suggest 'is critically important to give her a greater probability of survival'. The physicians ask the family to give consent to the double organ transplant. As heart and lungs need to be transplanted into the recipient four to six hours after retrieval from the donor compared to the liver (8-12 hours) or the kidneys (24 hours), time presses. At the same time, a media report on a recent and rather successful heart transplant conducted by the same transplantation team could be followed everywhere (newspapers, local TV). With great faith in and respect for the doctors following their success in this heart surgery the family consents. After the operation, immunosuppressive drugs are administered as post-operative procedures and she is put on a heart-lung-machine. The organs, however, fail to show any progress or signs of any ability to function on their own. The doctors are discussing whether it makes sense to inform the family who lives far away from the hospital about the bad outcome of the transplantation and the high risk of the patient to die soon.

Siti Nurani Mohd Nor, Malaysia

Please discuss the alternatives and justify your answer!
How should the transplantation team proceed?

1. The hospital team does not inform the family and makes several attempts to disconnect the patient from the life-sustaining machine. After three weeks the patient dies and the family is informed that she died after her blood pressure had dropped sharply.
2. The transplantation team decides to perform a second double transplantation of heart and lung because the risk of dying is serious and the patient is still young.

3. The hospital team informs the family that there is a high risk for their daughter to die. They might come and say good bye to her because the medical options to help her are limited.

XXIV. Case: Post-mortem organ donation – parental consent

A family of four, on a holiday trip to the beach, becomes involved in a tragic highway accident. Their car has a frontal collision with a truck and three persons (both parents and their 13-year-old daughter) are killed on the spot. The 11-year-old son survives and is rushed to hospital in a critical condition. The nearest hospital happens to be a university medical center with a paediatric trauma unit. The boy is admitted to the neurology intensive care department with serious intracranial damage, and is put on a ventilator. After two days, the neurologist diagnoses clinical brain death, which is confirmed by performing a series of neurological tests. He discusses with the in-house transplant coordinator that this patient might be a potential organ donor. They approach the young patient's uncle and aunt, who are present in hospital and ask for their opinion on the situation. Under Dutch law, the parents normally are the persons designated to give consent for organ donation when their child is under 16 years of age. If, for whatever reason, this is not possible, the child's legal guardian can make a decision.

The boy's uncle tells the neurologist that he had discussed with the parents that he and his wife would act as guardians, in case something happened to the parents. However, this arrangement has never been legally recorded. The uncle says that he and his wife are themselves in favor of organ donation. There also happens to be a grandfather, living in Australia, who – according to the law – would be the first in line to make a decision in place of the deceased parents. However, this grandparent can not be reached in time. The neurologist and transplant coordinator are *in dubio* what to do, as time is pressing.

Michael Bos, The Netherlands

Please discuss the alternatives and justify your answer!
How should the surgeon respond?

1. The doctors finally decide to call off the donation because this grandparent could not be reached in time to resolve the situation. The boy is taken off the ventilator and is buried three days after his parents.
2. The doctors agree to follow the decision made by the uncle, because the grandfather has not had real contact with his family for many years and cannot be reached to make a decision.
3. The doctors try to contact the grandfather because he has to be informed anyway of the death of the parents and the children. If they cannot contact him, the donation cannot take place.
4. The doctors consult the national Organ Donor Register and find out that both parents were registered as organ donors. From the fact that the parents are generally in favor of organ donation they conclude that they would have consented to the donation of their son's organs. Organ retrieval takes place.

XXV. Case: Xenotransplantation – human trial and informed consent

Dr. W.Y. has been collaborating with international scientists and clinicians for several years in the hope to find a cure for diabetes, which has become alarmingly prevalent in western nations. A potential solution lies in the xenotransplantation of porcine pancreatic islet cells. There has, however, been reluctance to move this technique forward to the clinic, out of fear that xenotransplantation would allow transmission of a new infectious disease (xenozoonosis) in the prospective recipient and his or her social environment. In response to this public health threat, various regulatory and advisory authorities around the world have published stringent safety protocols for xenotransplantation research and trials. However, these recommendations are not legally binding in most countries. The protocols include a requirement for life-long-term medical monitoring and permanent traceability of the recipients. If deemed necessary, life style restrictions will be enforced to restrict exposure to others. In the midst of discussions on the preferable conditions for (re-) initiation of clinical applications, Dr. W.Y. surprisingly submits the publication of the four year follow-up results of an islet cell xenotransplant trial to one of the world leading journals in science and medicine. The article states that the xenotransplants significantly reduced insulin requirement in seven out of the twelve diabetic recipients. No evidence of infection was found. The trial recipients were adolescents aged 11 to 17 in a country without any specific regulation for xenotransplantation. The follow-up monitoring of the young adults was done for research purposes and was thus stopped after four years. The editor is unsure whether to publish the article.

An Ravelingien, Belgium

Please discuss the alternatives and justify your answer!
How should the editor decide?

1. The editor will publish the article because Dr. W.Y., has acted in the patients' best interest, for alternatives to the discontinuation of insulin injections are currently lacking. Indeed, in light of the potential benefits of xenotransplant applications, trials must be conducted and published as soon as possible.
2. The editor will publish the article because the research was in accordance with the local standards.
3. The editor is questioning to what extent the recipients' consent was truly "informed". Given their age, they may be incompetent to fully acknowledge the magnitude of the risks and related responsibilities. Thus, he rejects the publication because of ethical reasons.
4. The editor suggests that Dr. W.Y. conduct a second stage of the study with adults to confirm the results and to fulfill the international recommendations for safety protocols.

XXVI. Case: Organ trade – post-surgical follow-up treatment

Mr. Z.A., a 64-year-old male with end-stage renal disease (ESRD), had been undergoing dialysis for 18 months. He had become extremely depressed at the prospect of spending years on the UNOS list waiting for an available organ. He therefore travelled to India to undergo a living unrelated kidney transplant, for which he paid a "broker" $10,000 (inclusive of organ and transplantation, although the amount the "donor" received is not known).

11 days after his transplant, he returned home and he comes to a major public U.S. hospital with a large lymphocele, CMV pneumonitis, and only four days worth of immunosuppressants. After checking record and evaluating the patient, the doctor realizes that the patient underwent an illegal organ trade under bad medical and hygienic conditions. The doctor is unsure what to do.

Eric J. Grossman, Giuliano Testa and Peter Angelos, U.S.A.

Please discuss the alternatives and justify your answer!
How should the doctor respond?

1. The doctor provides post-surgical follow-up care to this patient as he would do to anybody else.
2. The doctor rejects the treatment of the patient because it is the patients own fault and risk to undergo an illegal organ transplantation.
3. The doctor calls the police to inform them about the illegal organ trade.
4. The doctor offers the patient standard post-transplantation but the costs have totally to be covered by the patient and not by the public health service.

XXVII. Case: Organ trade – supporting medical tourism

Mrs. B.C., aged 66, is a retired publisher residing in Arizona, USA. Previously she was diagnosed with chronic kidney disease, and she recently entered stage four. The need for dialysis treatment is soon approaching, but Mrs. B.C. prefers to spend her retirement healthy and mobile.

A friend of Mrs. B.C. refers her to a medical tourism agency which then connects her with a hospital in India performing kidney transplants for $65,000; the guarantee of a kidney is included. Mrs. B.C. is informed that the kidney donor will be paid $25,000, and that such a transaction is legal; in fact, the kidney donor will be paid $1,600, and the sale of kidneys is illegal in India. Transportation costs, post-operative hotel and medical costs, and a service fee total the treatment costs to $86,000.

After depositing $25,000 for the treatment with the medical tourism agency, Mrs. B.C. discusses her plans with her nephrologist. Mrs. B.C. expects to remain a patient following the transplantation procedure, and she wants to schedule an appointment soon after her return to the United States.

Matthew Hamilton, U.S.A.

Please discuss the alternatives and justify your answer!
How does the nephrologist respond to Mrs. B.C.?

1. He informs Mrs. B.C. of the medical and ethical risks entailed in paying for a kidney and undergoing a medical procedure abroad. He encourages Mrs. B.C. to look into previous alleged organ trading cartels in India and other parts of the world, and he urges her to investigate the reputation of the hospital and healthcare providers.
2. The nephrologist assures Mrs. B.C. that she will remain his patient on the condition that she signs a form protecting against malpractice claims related to all post-operative care to be provided.
3. He reports to international legal authorities about the alleged hospital and/or medical tourism agency and their operating an illegal kidney cartel.
4. The nephrologist strongly dissuades Mrs. B.C. from seeking care abroad. He informs her that her status as a patient in the practice will be denied so long as she receives the transplant abroad.

XXVIII. Case: Organ trade – socio-economic dependency between donor and recipient

Mr. D.E., aged 55, owns a manufacturing company near the Mexico-U.S. border. His kidneys have degenerated to the point of failure, and starting dialysis is imminent. Mr. D.E.'s physician places Mr. D.E. on the kidney transplant list, but Mr. D.E. is both impatient and unwilling to wait the estimated five years for a kidney while undergoing dialysis.

Mr. D.E.'s wife is too unhealthy to donate a kidney, and Mr. D.E.'s sole daughter is currently pregnant. He has no other family members, so he decides to ask his employees if they are willing to donate one of their kidneys in exchange for an agreed-upon sum. Mr. D.E.'s manufacturing company employs predominantly Mexican and Central American immigrants, and he discretely extends the offer to a group of workers which he gathers in his office. He initially offers $50,000 to one who donates; he adds a further incentive such as a two-month break.

Ms. F.G., aged 27, comes forward; her family in Comarca Lagunera, Mexico, needs the money. She speaks no English, is not married, and she has one son living with her sister in Mexico. Mr. D.E. arranges for the necessary appointments with the medical practitioners on behalf of Ms. F.G., and her medical evaluation deems her a suitable donor.

The nephrologist suspects coercion, although both Ms. F.G. and Mr. D.E. adamantly deny the accusation. Both sign the necessary consent and waiver forms, and a surgery date is scheduled. Nevertheless, qualms persist for the nephrologist.

Matthew Hamilton, U.S.A.

Please discuss the alternatives and justify your answer!
What should the physician do?

1. The doctor reports the case to a local law enforcement agency for investigation.
2. He suspends the scheduled surgery, and informs Mr. D.E. that he suspects the criteria governing legal unrelated donation are being violated.
3. The doctor acknowledges his qualms but presumes that if Ms. F.G. is being compensated, it is likely adequate, necessary, and

just in light of Mr. D.E.'s and Ms. F.G.'s present constraints. He continues with the surgery.

4. The doctor orders a psychiatric evaluation of Ms. F.G. to determine if she is mentally fit to donate her kidney to Mr. D.E. The doctor will base his decision to move forward largely on the results of the psychiatric evaluation.

XXIX. Case: Organ traffic – financial incentives for doctors

Professor H.I. is the head of a kidney transplant team in a medium-sized hospital in Queens, NYC. A man requests to meet him to interview him about the basics of organ transplantation; he claims to be a student at a local university. During the meeting, he reveals to the Professor that his father is currently on dialysis in need of a new kidney. His father, Mr. K.L., is aged 62 and runs a technology firm along with several new media companies. He wants to stay alive to manage his companies, enjoy his wealth, and spend more time travelling.

This man also reveals to the Professor that he has a willing donor: a 45- year-old female Moroccan immigrant currently residing in the Bronx. He offers the Professor $350,000 in cash to have him and his transplant team perform the transplant procedure; in exchange for the money, the man requests that the procedure remain discrete and confidential. He adds that in exchange for the money, no scrutiny must be given to the origins of the transplanted kidney.

The man claims that if investors or the general public discover that Mr. K.L. is sick at all, the stock of his companies will plummet. The estimated loss of wealth figures in the billions. In fact, 35% of the Professor's retirement fund is invested in companies run by Mr. K.L. In addition, he notes that the kidney donor will be handsomely rewarded, and he ends the meeting remarking, "It's a win-win situation: our donor can buy a house, you are paid in cash, and one of the greatest company owners will remain alive and wealthy!"

Matthew Hamilton, U.S.A.

Please discuss the alternatives and justify your answer!
What should the professor do in this situation?

1. The Professor agrees to participate in the surgery following the customary pre-operative medical tests and evaluations, but he denies the $350,000 and sees no reason why confidentiality cannot be maintained through traditional means.
2. He agrees to participate in the surgery following the customary pre-operative medical tests and evaluations, but he also accepts the $350,000 and uses it to purchase medical supplies and equipment for a local clinic.

3. He refuses to participate in the procedure. He is not willing to transplant a kidney that has been obtained through financially coercive means.
4. He refuses to participate in the procedure because he does not want to transplant a kidney that has been obtained through financially coercive means, and because it is morally wrong to participate in a procedure where the outcome could adversely affect your own financial situation.

XXX. Case: From the perspectives of the patient – is there a right to buy a kidney from a stranger from another country?

Ms. M.N. is a 38 year old married woman who has suffered, since childhood, with polycystic kidney disease. She began dialysis treatment at the age of 18 and was the grateful recipient of a kidney from a deceased donor several months later. The kidney functioned minimally for five years until it was rejected. Ms. M.N. went back on dialysis which she describes as a "half-life, a living death". Two years later, her father, recently recovered from a heart attack, insisted that he be allowed to give a kidney to his daughter. The second kidney functioned well enough for eight years until it, too, was rejected. This time Ms. M.N. was determined not to go back on dialysis which was fully paid for by her insurance. Ms. M.N.'s younger sister was willing to serve as a related donor but she feared that the donation could interfere with her sister's desire to have a child. Thus, Ms. M.N. was advised by her nephrologist that dialysis was her only solution unless she were willing to travel overseas. He referred her to a broker who proposed a 'transplant tour' to a city in South Africa where she would be met by a prematched, paid kidney donor from another country. The transplant (including travel, care and payment of the donor, and all screening, hospital and surgical procedures) would cost $180,000, part of it paid through her national medical insurance program, part from personal bank loans, and part from a fund raising campaign by a charitable religious organization. She was told that the private hospital there was one of the best in Africa, that the Ministries of Health in both her home country and South Africa were "tolerant" of paid donation despite laws that prohibited this. However, she would have to state that the donor was a relative and that he or she had not been compensated for their gift of life.

Ms. M.N. is hesitant, but when she learned that her donor would be a healthy young worker from rural Moldavia, she was ecstatic. She and her parents had migrated to Israel from Moldavia when she was five years old. Ms. M.N. tells her doctor: "This is a great blessing for me because I would be receiving a kidney from a person who would be bio-genetically closer to me than a stranger from another country. Moldavia is a small country and we are all sort of related, so I don't have to

feel that I am telling a lie". Ms. M.N. is also told that her donor is the father of a small family living in dire poverty.

She is now deciding with her closest friend, who happens to be a nurse, what to do and whether to accept the propositions.

Nancy Scheper-Hughes, USA

Please discuss the alternatives and justify your answer!
What should the friend recommend?

1. Ms. M.N. is told by her physician that the extreme scarcity of deceased donor organs in her country and her added risk of rejecting another kidney means that her only chance of refusing dialysis is to travel abroad for a transplant she could not have in her home country. Ms. M.N. is justified in breaking the law in two countries – visa fraud, trafficking persons in Moldavia and medical fraud, lying about the relationship to the donor, and illegal payment for organs in South Africa – because she has an unalienable right to medical self-defence.
2. Ms. M.N. has already rejected two kidneys, one from a cadaveric donor and one from her father who was an almost perfect match. Given her tendency to reject again soon a third kidney from a person who is unlikely to be as well matched as a close relation, the moral and practical burden of such a decision is not justified.
3. Ms. M.N. is told that her kidney seller was recruited through a broker and that he would be paid $3,000 for his organ. She also knows that the man is a peasant with two very young children and that his wife is very ill with cancer and the cash he could earn by selling an organ would be used to get his wife specialized care in a private hospital that she could not get at a free public hospital of Moldavia. So there is a win-win-situation for the donor as well as Ms. M.N. as she and her kidney seller would be saving each others' lives.
4. Ms. M.N. has a brother and a sister. Her younger sister, age 29, is willing to serve as a donor. Until now Ms. M.N. and her physician rejected this option on the grounds that the sister was hoping to get pregnant and Ms. M.N. was led to belief that kid-

ney donation might affect her sister's ability to carry a child to full-term. However, because of the moral problems involved in organ trafficking it would be better to ask the sister to postpone starting her family until after she donates a kidney or to approach the brother, who has not been asked if he is willing to serve as her donor. There is one caveat: there is the possibility of a genetic risk in certain forms of polycystic kidney disease shared among siblings.

Part C: Movies as teaching material – ethical issues in organ transplantation

Sabine Wöhlke, Silke Schicktanz

Movies can be a wonderful starting point to teach the ethics of organ transplantation. They usually rely on a kind of moral knowledge. Teachers can use these popular narratives for bioethical reflection: they provide useful, compelling, and even "cool" case studies for bioethical issues and give fleshed-out interpretations of bioethical claims.

Films provide compelling illustrations for philosophical ideas. We suggest using cinema for its pedagogical value. If the alleged cinematic-philosophical insight can be paraphrased in a linguistic form, and thus communicated discursively, then the film no longer serves as an exclusive (visual) vehicle for such knowledge (see Livingston 2006). Films can provide vivid and emotionally engaging illustrations of bioethical issues, and when sufficient background knowledge is in place, reflections about films can contribute to the exploration of specific theses and arguments.

Most of the films treated in this volume are a pleasure to watch and are intellectually stimulating. By grounding bioethical discussions and arguments in a film, students will gain a sense of the excitement and fascination of philosophical bioethics and will use their minds and hearts to better comprehend the key issues, methods, and arguments used in this field to reason through these issues.

A more ambitious claim for the value of film for philosophy is to see some films as not merely illustrating independently given philosophical ideas but also as offering an interpretation and advanced understanding of these. Instead, literature and movies could be seen as thought experiments in which technological and medical developments are interpreted, elaborated and critically discussed in their consequences for individuals, society, and body-mind conceptions.

We have chosen nine examples of internationally known movies, that in their story-line explicitly refer to organ transplantation (see table

on the following pages): John Q.; Heartless; COMA; 21 Grams; Mary Shelley's Frankenstein; Todo sobre mi madre/All about my mother; The Island; Flow and the Educational Outreach Kit; Shichinin no tomurai/The Innocent Seven. The general topics of all these films are manifold and vary from identity problems, brain death, body conceptions, guilt, indebtedness, cloning, tissue donation and many more. We analyzed these films by developing a list of questions which could be used by instructors for stimulating a discussion on ethics in class. We suggest that teachers select single scenes for discussing particular problems. The discussion of movies could start with the ethical dimension but could be extended to a broader perspective of how a movie is biased with respect to different ethical perspectives, how visual and audio effects stress or undermine emotions, arguments, and perspectives. However, this list of provided questions is seen as a starting point and a didactical help for teachers. Of course, it could and should be enlarged and individually adapted to different settings.

Finally, it is the responsibility of each teacher to ensure that the use of movies for teaching is in line with national and international copy rights.

Table of movies

	John Q
Directed by *Background information on the web*	Nick Cassavetes Movie, USA 2002, 01:52 h http://en.wikipedia.org/wiki/John_Q. <04/02/2010>
General topics	Organ donation Heart transplantation Health care system in USA Waiting list Role of family decision making Attempted extortion
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues raised in the movie such as: • Injustice between classes and ethnicities • Mean-end relationship • Decision-making in the family • Justice in organ allocation • Communication between physicians and family Identify and discuss the use of language and pictures in the movie: • How is organ transplantation pictured? • How are aims and methods of modern medicine represented?
	Heartless
Directed by *Background information on the web*	Nick Laughland Movie, GBR-Scotland 2005 01:32 h http://www.imdb.com/title/tt0429288/ <04/02/2010>
General topics	Heart attack Heart transplantation Identity problems

Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues raised in the movie such as: • Concept of the body • Concept of personal identity • Emotional aspects of organ transplantation • Cultural meaning of the heart • Cultural meaning of other organs

COMA

Directed by *Background information on the web*	Michael Crichton Thriller, USA 1978, 01:48 h http://en.wikipedia.org/wiki/Coma_(film) <04/02/2010>
General topics	Brain death Illegal organ trade Body concept Health care system
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues raised in the movie such as: • Definition of death • Trust in the medical system • Diagnosis of death • Whistle blowing • Ethical treatment of dead bodies Identify and discuss the historical aspects of the movie and recent changes: • Acceptance of organ transplantation • Brain death • Organ trade • Public image of doctors

	21 Grams
Directed by *Background information on the web*	Alejandro González Iñárritu Movie, USA 2003, 2:05 h http://en.wikipedia.org/wiki/21_Grams <04/02/2010>
General topics	Death Organ donation Post-mortem donation Psychological problems Guilt Reciprocity Donor-recipient relation Donor's family
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues in the movie such as: • Emotional and psychological problems of recipients • Anonymity of donors • Imagination of donor's identity • Circumstances of donor's death
	Mary Shelley's Frankenstein
Directed by *Background information on the web*	Kenneth Branagh Movie USA 1994, 02:03 h http://en.wikipedia.org/wiki/Mary_Shelley%27s_Frankenstein <04/02/2010>
General topics	Dying Artificial life Scientist's responsibility Body snatching Medical experiment
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues raised in the movie such as: • Short-term and long-term responsibility of doctors and scientists • Endeavors to create artificial life

	• Limits to scientific curiosity Identify and discuss the use of language and pictures in the movie: • What is the role of the "monster"? • How does the image of the monster differ between various versions of "Frankenstein"? • How is science in the 19th century depicted differently from science in the 21st century? • Public image of and expectations towards researchers
	Todo sobre mi madre / All about my mother
Directed by *Background information on the web*	Pedro Almodóvar Movie, ESP 1999, 01:37 h http://en.wikipedia.org/wiki/All_About_My_Mother <04/02/2010> http://www.imdb.com/title/tt0185125/ <04/02/2010>
General topics	Death Organ donation Role of family decision making Medical education Informing relatives Transsexuality
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues in the movies such as: • Informing family about brain death of a relative • Asking family to consent in organ donation • Role of identity (recipient) • Role of identity (transsexual father) • Problems of proxy decisions Identify and discuss the use of language and images in the movie: • How is the clinical system presented? • How is the competence of physicians represented? • How is doctor-patient communication represented?

	The Island
Directed by *Background information on the web*	Michael Bay Movie, USA 2005, 02:16 h http://en.wikipedia.org/wiki/The_Island_(2005_film) <04/02/2010> http://www.imdb.com/title/tt0399201/ <04/02/2010>
General topics	Science fiction Cloning Organ donation Instrumentalization Organ shortage
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues in the movies such as: • Cloning and individuality • Genetic determinism vs. social determinism • Organ shortage • Freedom and autonomy • Public fears of cloning • Relationship between original and clone Identify and discuss the use of language and images in the movie • What is fictional and what is evidence-based in the representation of cloning? • Aim and purpose of organ donors? • How is the role of state and economy represented?
	Flow/Flow Educational Outreach Kit
Directed by *Background information on the web*	Anonymous / Donate life America Documentary, USA 2001 Educational material http://www.jrifilms.org/flow.htm#<04/02/2010>
General topics	Pro organ donation Tissue donation Donor card and driver license Decision making

	Family consent Perspective of recipients
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues in the movies such as: • Motivation pro organ donation • Altruism • Social responsibility

Shichinin no tomurai / The innocent seven

Directed by *Background information on the web*	Dankan Movie, Japan 2005 http://en.wikipedia.org/wiki/Shichinin_no_Tomurai <04/02/2010> http://www.office-kitano.co.jp/tomurai/en/index.html <04/02/2010>
General topics	Organ traffic Parent-child relationship Child abuse
Ethical questions to trigger seminar discussion	Identify and discuss the main ethical issues in the movies such as: • Organ donation by children • Child abuse • Modern slavery • Concepts of body • Parents' responsibility • Cultural meaning of organs

Literature on the use of movies for medical ethics education

Barnett, Mark A.; Klassen, Michael; McMinimy, Vera; A Schwarz, Laurel (1987) The Role of Self- and Other-oriented Motivation in the Organ Donation Decision. Advances in Consumer Research, 14, p. 335-337

Bordwell, David; Thompson, Kristin (1997) Film Art: An Introduction, Mc-Graw-Hill, New York, 5. Ed.

Coldry, Nick; Hepp, Andreas; Krotz, Friedrich (editors) (2009) Media Events in Global Age, Routledge, London

Dans, Peter, E. (2000) Doctors in the Movies. Boil the Water and Just Say Aah, Medi-Ed Press, Lansing

Frampton, Daniel (2006) Filmosophy, Wallflower Press, London

Livingston, Peter (2006) The Very Idea of Film as Philosophy. Journal of Aesthetics and Art Criticism 64, 1, p. 11-18

Nelson, Hilde L. (editor) (1997), Stories and Their Limits. Narrative Approaches to Bioethics, Routledge, London

Nolan, Barbara, E.; McGrath, Patrick, J. (1990) Social-cognitive influences on the Willingness to donate Organs. In: Shanteau, James; Jackson, Richard, Harris (editors): Organ donation and Transplantation: Psychological and Behavioral Factors. APA, p. 25-36 Livingston, Peter (2006) The Very Idea of Film as Philosophy. Journal of Aesthetics and Art Criticism 64, 1, p. 11-18

Shapshay, Sandra (editor) (2009) Bioethics at the Movies, Hopkins University Press, Maryland

Shelton, Mary Lou; Rogers, Ronald W. (1982) Fear-arousing and Empathy-arousing Appeals to Help. The Pathos of Persuasion. Journal of Applied Social Psychology, 11, p. 366-378

Websites / open access:

a) ETHICS AND FILM /A Human Rights Perspective: This is an academic, non-profit enterprise destined exclusively to be implemented for teaching, research and extension work. All work included is the intellectual property of their stated author. Department of Psychology, Ethics and Human Rights, School of Psychology University of Buenos Aires, In collaboration with the Ecobioethics Iberoamerican Network. The UNESCO Chair in Bioethics. How to use movies for ethical discussions and possible movies:
See: http://www.eticaycine.org/-english (in English and Spanish) <04/02/2010>

b) A Cross-Cultural Introduction to Bioethics, Darryl R.J. Macer, Ph.D. (Editor), Eubios Ethics Institute, 2006. The book is the product of a UNESCO Bangkok project in collaboration with a pre-existing grant to Eubios Ethics Institute, and is the result of critical review and evaluation of trials held in ten (plus) countries. The book is a compilation of materials available at that time, and new materials are being developed and assembled.
See: http://www.unescobkk.org/rushsap/ethics-resources/bioethics-textbook/ <04/02/2010>

c) The Center for Bioethics and Human Dignity: (a Christian Medical ethics institution) offers online a short course description on various movies and examples for questions: Bioethics and the Movies: Discussion Questions and Supplemental Readings, by Mary B. Adam.
See: http://www.cbhd.org/content/bioethics-movies <04/02/2010>

List of Contributors

(in alphabetical order)

Ahmet Acıduman, Ankara University School of Medicine, Medical Ethics Department, TURKEY
Contact: ahmetaciduman@yahoo.com

Peter Angelos, Mac Lean Center of Clinical Medical Ethics, University of Chicago Medical Center, USA
Contact: pangelos@surgery.bsd.uchicago.edu

Berna Arda, Ankara University School of Medicine, Medical Ethics Department, TURKEY
Contact: Berna.Arda@medicine.ankara.edu.tr

Michael A. Bos, Health Council of the Netherlands, The Hague, THE NETHERLANDS
Contact: mike.bos@gr.nl

Gerald Brandacher, University Clinics for Visceral, Transplantation and Thorax Surgery, Medical University of Innsbruck, AUSTRIA
Contact: gerald.brandacher@i-med.ac.at

Harold Bursztajn, Program in Psychiatry and the Law @BIDMC of the Psychiatry Department of Harvard Medical School, USA
Contact: harold_bursztajn@hms.harvard.edu

Amnon Carmi, UNESCO Chair for Bioethics, University of Haifa, ISRAEL
Contact: acarmi@research.haifa.ac.il

Leonardo D. de Castro, Centre for Biomedical Ethics, Yong Loo Lin School of Medicine: National University of Singapore, SINGAPUR
Contact: decastro@nus.edu.sg

Sondra E. Cohen, John Schumann,
University of Chicago Medical Center, USA
Contact: scohen@surgery.bsd.uchicago.edu

John R. Crossfield, Mayo Clinic, USA
Contact: crossfield.john@mayo.edu

Oliver Decker: , Department of Medical Psychology and Medical Sociology, Medical Department, University of Leipzig, GERMANY
Contact: deco@medizin.uni-leipzig.de

Buranbek Diusheev, Department of Neurology and Neurosurgery of Kyrgyz State Medical Academy and Kyrgyz Russian Slavic University, Chief Neurosurgeon of the Ministry of health of the Kyrgyz Republic, National Hospital, KYRGYZSTAN
Contact: buranbek@yahoo.com

Kris Gledhill, Faculty of Law, University of Auckland, NEW ZEALAND
Contact: k.gledhill@auckland.ac.nz

Diego Gracia, History of Medicine and Bioethics, School of Medicine, Complutense University of Madrid, SPAIN
Contact: dmgg@med.ucm.es

Eric J. Grossman, Mac Lean Center of Clinical Medical Ethics, University of Chicago Medical Center, USA

Matthew Hamilton, 333 Spalding Road, DE 19803Wilmington, USA
Contact: matt.colemanhamilton@gmail.com

Abi Gopal, Harvard Medical School, Boston USA
Contact: abi.gopal@gmail.com

Omar Sultan Haque, Harvard Medical School, Boston, USA
Contact: omarsultanhaque@gmail.com

Medard Hilhorst, Erasmus MC Rotterdam,
THE NETHERLANDS
Contact: m.hilhorst@erasmusmc.nl

Klaus Hoyer, University of Copenhagen, Institute of Public Health, Department of Health Services Research, DENMARK
Contact: K.Hoeyer@pubhealth.ku.dk

Tamara Kudaibergenova, Bioethics and Rights, Kyrgyz-Russian Slavic University, KYRGYZSTAN
Contact: ahtamar@hotmail.com

Josef Kuře, UCB and Department of Medical Ethics, School of Medicine, Masaryk University, Brno, CZECH REPUBLIC
Contact: jkure@med.muni.cz

Chang-fa Lo, National Taiwan University (NTU) Asian Center for WTO and International Health Law and Policy, TAIWAN
Contact: lohuang@ntu.edu.tw

Manuel Maglione, University Clinics for Visceral, Transplantation and Thorax Surgery, Medical University of Innsbruck, AUSTRIA
Contact: manuel.maglione@i-med.ac.at

Irma Manjavidze, Tbilisi State Medical University, Member of Ethics Committee, GEORGIA
Contact: imanjavidze@yahoo.com

Siti Nurani Mohd Nor, Department of Science and Technology Studies, Faculty of Science, Universiti Malaya, MALAYSIA
Contact: sitinuraninor@um.edu.my

Ricardo Rabinovich-Berkman, Universidad del Museo Social Argentino, ARGENTINA
Contact: rrabinovich@gmail.com

An Ravelingien, Bioethics Institute Ghent, Ghent University, BELGIUM
Contact: An.Ravelingien@ugent.be

Christine I. Rodriguez, Mayo Clinic, USA
Contact: rodriguez.christine@mayo.edu

Nancy Scheper-Hughes, Chancellor's Professor of Anthropology, University of California, Berkeley, USA
Contact: nsh@berkeley.edu

Silke Schicktanz, University Medical Center Goettingen, Dept. of Medical Ethics and History of Medicine, GERMANY
Contact: silke.schicktanz@medizin.uni-goettingen.de

John Schumann, University of Chicago Medical Center, USA
Contact: schumann@uchicago.edu

Giuliano Testa, University of Illinois at Chicago, USA
Contact: giuseppe.testa@ifom-ieo-campus.it

Gabriele Werner-Felmayer, Division of Biological Chemistry, Biocenter, Innsbruck Medical University, AUSTRIA
Contact: gabriele.werner-felmayer@i-med.ac.at

Claudia Wiesemann, University Medical Center Goettingen, Dept. of Medical Ethics and History of Medicine, GERMANY
Contact: cwiesem@gwdg.de

Merve Winter, Department of Medical Psychology and Medical Sociology, Medical Department, University of Leipzig, University of Zürich, GERMANY
Contact: merve.winter@uni-due.de

Sabine Wöhlke, University Medical Center Goettingen, Dept. of Medical Ethics and History of Medicine, GERMANY
Contact: sabine.woehlke@medizin.uni-goettingen.de

Moshe Zaki, Head of the Department of Psychology, Law and Ethics, International Center for Health, Law and Ethics, Faculty of Law, University of Haifa, ISRAEL
Contact: tcarmel14@walla.co.il

Kristin Zeiler, Department of Medicine and Health Sciences Linköping University Linköping, SWEDEN
Contact: krize@ihs.liu.se

Vaclav Zvonicek, Department of Medical Ethics, Faculty of Medicine, Masaryk University, Brno, Department of Anesthesiology and Intensive Care, St. Anne's Faculty Hospital, Faculty of Medicine, Masaryk University, Brno, CZECH REPUBLIC
Contact: zvonicek@fnusa.cz

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