



## Ethical concerns in early 21<sup>st</sup> century organ transplantation

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### Abstract

Medical ethics is an indispensable and challenging aspect of clinical practice. This is particularly prominent in the field of organ transplantation. In this paper, initially, a clinical case with brain death that ended up as an organ donor will be presented. Following the presentation, important moral challenges which initially formed medical ethics and some highlights of it in organ transplantation will be discussed in detail. The impact of complex modern influential factors that might interfere with the practice of medical ethics in this field such as patients' vulnerability, financial temptations, and legal regulations will be also dealt with. Finally, we shall propose practical guidelines aiming at improving the practice of medical ethics in the emerging issue of organ transplantation.

**Keywords:** Organ donation, Informed consent, Population vulnerability.

### Introduction

Since antiquity, shamans, healers, and physicians have played a pivotal role in safe-guarding individual and public health. In order to be able to better perform their duties they have always been granted privileged ethical and financial positions, and physicians have always been considered as impeccable professionals from an ethical point of view. This image however, is in danger of being distorted as novel medical issues emerge. Patient-doctor relation used to be quite simple and straight forward in the recent past; today this relationship is facing new challenges as decision-making have become more complex and less transparent. In fact, physicians are integrated into a complex health care system where financial issues and politics play an integral role. Organ donation and transplantation

have been only recently introduced to the practice of medicine. Naturally, the issue faces different ethical, professional and financial challenges in different parts of the world as cultures, laws, and regulations differ vastly.

### Case Scenario

A 45 year-old immigrant worker was brought unresponsive to an emergency room at a tertiary care center at his host country. Primary diagnostic evaluations indicated brain stroke with midline cerebral shift. He received mechanical ventilation and was admitted to the intensive care unit (ICU). A perfusion brain scan followed and confirmed the diagnosis of "brain death". The Main responsible

physician (MRP) was aware that such cases were usually referred to a local transplantation center for possible organ donation. He was also told that the patient's family would be "compensated" by the transplantation center. The MRP initiated the process by contacting the patient's family, employer and country's embassy in order to consult the issue of organ donation, and possibly obtain an informed consent. No contact was made back for 2 days. On the third admission day, the MRP was notified that the patient is going to be taken to the operating room (OR) for organ procurement. He proceeded to the ICU personally to make sure that the informed consent was obtained. Within the patient's chart, he founded an undated, unsigned, hand-written form claiming the approval of the patient's "cousin" for organ donation. The MRP objected to the "consent" and demanded further clarification from the hospital and the transplantation center. He was subsequently contacted by his department's Chairman inquiring about the "delay" in taking the patient to the OR. The transplantation center was contacted again and the surgical team postponed their intervention. Later on, two different properly prepared informed consents were produced: one from the hospital and the second from the transplantation center. The following morning, the patient was taken to the OR where his heart, liver, kidneys and corneas were removed; he was pronounced dead thereafter.

### Background

Throughout the whole history of human civilization, doctors and healers have had high social status. Physicians were still considered as extremely honest and highly trustworthy. In a poll conducted in 2009 by the Royal College of Physicians, it was found that doctors won the highest confidence rate of British adults community (92%) compared to that of politicians who achieved only 13% trust rate (1). It is important to mention that human ethics in general have been traditionally directed and formed by religious and cultural principles. The unique position of mankind and its sanctity has always been respected worldwide. There are several examples of such respect including the following verse from the Holy Quran, Muslims most respected holy book: "*And indeed, We have honored the Children of Adam, and We have carried them on land and sea, and have provided them with lawful good things, and have preferred them above many of those whom We have created with a marked preference*" (Chapter 17:70) (2). From the Old Testament: "*Whoever sheds the blood of man, by man shall his blood be shed; for God made man in his own image*" (Gen 9:6) (3). In the Hinduism, Buddhism, and Jainism teachings, the concept of "*Ahimsa*" is promoted as the

doctrine of respect for all life and therefore an extreme form of refraining from violating it (4).

Ethics in medicine has been evolving continuously. The Hippocratic Oath is probably the first documented evidence in medical ethics (5). Ishaq Ibn Ali Ruhawi, a 9<sup>th</sup> century physician, wrote a twenty-chapter book titled "*Adab al-Tabib*" (*Conduct of the Physician*) which can be considered as the first treatise exclusively written on medical ethics. He described physicians as "guardians of souls and bodies" in his book (6). Later on, the concept of written consent and patient-physician contract was adopted and enforced by an Ottoman Empire court in the 15th century (7). In recent years, many philosophers have contributed to the advancement of medical ethics. The 17<sup>th</sup> century German philosopher "Immanuel Kant" laid the foundation of a secular-based theory theory of freedom and autonomy which shaped and influenced the work of many other intellectuals (8). Further progress in medical ethics was only recently made following large scale repugnant atrocities such as the Nazi medical experiments or the Tuskegee Untreated Syphilis Study (9,10). Since then further ethical regulations, such as the "*Nuremberg Code*" and the "*Declaration of Helsinki*", were established to strengthen the integrity of medical ethics and to prevent from any further breach of ethical codes in the field of medicine.

Research regarding organ donation and transplantation has been growing fast in the past few decades. The first successful kidney transplantation was performed in 1954. The transplantation of body organs was possible by the development of immune suppressive drugs (11). In 1984, the United States Congress passed the National Organ Transplant Act (NOTA) to regulate this practice within the country. Breach of the strict NOTA regulations, such as organ purchase, carries severe penalties (12).

Although the majority of centers and caregivers around the world are following organ transplant legal guidelines, some fail to do so because of different reasons. In this paper, we shall discuss some of the challenges to the practice of organ donation and transplantation.

### Discussion

Despite the existence of clear delineation of modern medical ethics, physicians are increasingly facing complex moral situations. Nowadays their ethical approach to patient's care can be influenced by health industry regulations or financial motivations. The dilemmas in recent medicine and scientific research, such as organ donations and cloning, are really challenging traditional medical ethics. Careful analysis of this case scenario puts

forward a number of complex ethical challenges such as the following ones:

1. Patient's background: he was a migrant worker (presumably poor) away from his immediate family. In a recently published report, the United Nations stated that many such workers face different forms of abuse or neglect without proper legal support (13). What makes the problem more complex is the fact that most of these workers are from countries where corruption is notoriously rampant according to the reports provided by different organizations such as Transparency International (14). In many cases, there is little or no support available for such workers from the embassies of their home countries. Traditionally, certain groups such as children, pregnant women, prisoners, and the elderly are considered as vulnerable in terms of receiving social support. It can be argued that immigrant workers fit into this category and need more stringent protection. Further research needs to be carried out to shed some light on the issue of vulnerability of these people and strategies to be taken to protect them (15).
2. Third party involvement: with growing demand for human organs, the "transplantation business" is booming. The traditional "patient-physician relationship" is becoming complicated by a third party who is in charge of procurement and provision of organs. This third body falls into one of the three following categories:
  - *Illegal organ trade*: is rampant worldwide. Numerous revolting cases of physicians, hospitals, and brokers who were engaged in these illegal activities are reported (16). Obviously, such involvement of doctors or medical institutions is unethical and against the law. Stricter legal enforcement measures should be adopted to deter the criminals.
  - *Legitimate Transplant Centers*: stringently regulated and supervised by a set of well-defined frameworks and qualified personnel. In such settings, physicians can be of best assistance to their patients and their families to enable them to make an informed decision in dealing with such challenging situations.
  - *"Shady" institutions*: health care practitioners can occasionally face the possibility of dealing with local institution that offer questionable service or benefit from under-qualified staff. The physicians should be extremely careful in such situations. They need to be vigilant not only to protect their patients, but also their own ethical values and medical license.
3. Documentation requirement: a recent American study reported that many physicians are involved in dubious hospital chart documentation. This can indicate a potentially new trend of changing the paradigm of ethical attitude in regards with evolving factors such as reimbursement regula-

tions or litigation fear (17). In this case scenario, it is alarming to observe that the level of communication of an important issue such as organ donation was less than poor. Furthermore, the process of obtaining informed consent and its documentation, which is a crucial part in organ transplantation, was inappropriate. Physicians should be required to include informed, clear, and legal documentation in their patients' charts. This should be imperative for an ethical, professional, and legitimate practice.

4. Financial considerations: financial temptations can be difficult to resist for some patients, doctors, or hospital executives. This can even occur in wealthy countries with relatively robust health system. A study by Kranenburg et al showed that 25% of the general Dutch public would consider selling their kidneys for financial benefits such as life-long health insurance or receiving a sum of 25,000 Euros (\$ 35,000) (18). It can be imagined therefore, how impoverished individuals from economically disadvantaged countries would react to a similar offer. With the increasing trend of illegal organ trade, some governments are adopting stricter laws to stem the tide of this disturbing trade (19). In the presented case scenario, the issue of "family compensation" was raised. In this regard, three ethically challenging arguments can be put forward.
  - Potentially positive feed-back: the financial temptation can be very hard to resist, even for healthy individuals. Obviously, this temptation is much stronger for a sick person and / or his relatives in all likelihood. *Therefore*, such "compensation" can result in an increase in the number of future potential "donors".
  - When financial compensation is provided, the action ceases to be organ donation. It can be considered more as an official human organ trade which is obviously an illegal activity with harsh penalties in most countries if *not* in all of them.
  - There is a high possibility of conflict of interest in this transaction. Some Transplant Centers have obvious scientific gains in doing such procedures. Thus, such financial incentives for scientific advancement do not seem to be appropriate. This should be clearly differentiated from compensation after a catastrophic physical injury suffered by individuals. The latter is well recognized and regulated in many countries (20).
5. Career fulfillment: physicians have their own professional motivations such as intellectual challenge, research opportunities, and even the desire for future prestige (21). Increasing personal income can be another motivation and some doctors may choose to increase their income by getting involved in organ trade (22). Academic productivity can be another important element

that may drive doctors to achieve a higher academic status and rank. (23) When dealing with sensitive issues, such as organ transplantation, physicians ought to refrain from any activity that might distort the image of their ethical principles. Moreover, they need to learn how to resist pressures imposed by transplantation institute when their ethical principles are concerned.

6. Organ shortage crisis: Abouna has reported that in 2006, and in the United States alone, the waiting list for organ transplant surpassed 95,000 individuals. This shortage crisis is causing continuous decline in patients' quality of life (24). One could argue that thousands of such patients will fail to procure their needed transplantation organ even illegally.

The ethical challenges of organ donation and utilization are common in both developed and developing countries. Fortunately, solutions for this important problem are being developed. Efforts which are suggested to solve the issue can be categorized in the following different fields:

a) *Medical ethics education*: a recent American study concluded that ethics education, when integrated in residency curricula, can lead to significant improvements in resident-centered outcomes, such as knowledge and confidence in handling ethical dilemmas. The study has also shown that most general surgery residency courses do not routinely include in-depth ethics skills training and assessment into their curricula (25). In developing countries, the situation can be even worse. A Canadian study raised concerns over the possible exploitation of trainees and their patients (26). Medical schools and residency training programs need to develop structured ethical programs to better train future physicians and improve patients' rights protection.

b) *Ethics courses*: during their careers, health care practitioners should benefit from continuous courses in medical ethics, even mandatory if necessary. These courses should be innovative and creative in order to enhance healthcare providers' ability to solve and cope with complex and challenging ethical issues they might face (27).

c) *Community leaders' participation*: the field of medical ethics involves different layers of human participation. Throughout mankind's history, community leaders such as famous religious figures or prominent political icons have played an important role in maintaining high moral standards within their societies. Recent evidence indicates that positive spirituality enhances healing (28). Establishment of working partnership and mutual cooperation between such leaders and their health care counterparts can result in better benefiting the society where medical ethics is concerned. The impact of such collaboration on patients and the

general public can be substantially important. Future research in this aspect is warranted to elucidate the practical ways of contribution of the cleric and politicians.

d) *National governments regulations*: local legislators must be aware of crucial ethical issues within their communities. They must actively participate in drafting laws and endeavor to regulate and monitor them. They should help improve health care quality to limit potential illegal activity such as the illicit organ trade. Individuals or institutions who participate in such abhorrent activities must be severely penalized. A recent example of such legislations is the recently adopted (August 29, 2011) law by the Government of India to eradicate organ tourist trafficking (29).

e) *Transplantation centers' accreditation*: there are different types of transplant centers and their structure differs vastly from country to country. It can be of great benefit if a universal accreditation body is formed to regularly monitor and supervise the activities of different transplantation centers. The Joint Commission International (JCI) that accredits and monitors different hospitals worldwide can be used as a model.

f) *International cooperation*: In 2005, the World Health Organization (WHO) reported that 93,000 organ transplantations were performed in 91 countries indicating a rampant "Transplant tourism". The report describes organ exporting and importing countries supported by many documented pieces of evidence of illegal activities (30). Politicians and legislators all around the world ought to hold meetings to discuss this topic and argue future treaties to ensure that illegal organ trafficking is controlled and the public is protected from such activities. It can be suggested that multinational and international organizations such as the United Nations should be involved in any organ trade or donation activity. Although illegal organ trade might still continue, its prevalence would be considerably reduced.

## Conclusion

The subject of medical ethics has been evolving since many millennia ago. It is a dynamic and ever-changing subject that can be influenced by many different contributing factors. Health care providers, and especially physicians, are facing ethical dilemmas from trivial cases to complex ones such as organ trade. Therefore, they should be better prepared and well equipped with the insight they need to deal with ethically sensitive issues appropriately. As discussed in detail, the ultimate goal of performing ethical organ transplantation seems elusive without active participation and collaboration of religious leaders, politicians, health institutions, community leaders, national legislators, and international organizations. The

practical guideline of ethically based and legitimized organ transplantation should include:

1. Provision of systematic academic medical ethics education to future caregivers.
2. Population education, through mass media, about proper organ donation / transplantation, as well as possible illegal and un-ethical activities in this field.

3. Strengthening international and regional training activities in the battle against illegal organ trade.
4. Establishment of non-government and international organizations to carry out more research on the field.

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