

## Chapter 14

# Living Organ Donation Role of Ethics for Improved Clinical Practice

**Pierpaolo Di Cocco**

*Imperial College Healthcare NHS Trust, UK*

### **ABSTRACT**

*Solid organ transplantation represents one of the most important achievements in history of medicine. Over the last decades, the increasing number of transplants has not been of the same extent of the number of patients in the waiting lists. Live donation has been implemented in order to reduce the gap between supply and demand. From an ethical standpoint, the donation process from a live donor seems to violate the traditional first rule of medicine—primum non nocere because inevitably exposes healthy persons to a risk in order to benefit another person. In the chapter will be presented the crucial role of ethics and specific ethical issues in the different forms of live donation, such as financial incentives for living donation, reimbursement in unrelated live donation, minor sibling-to-sibling organ donation. The ethical aspects of live donor organ transplantation are continuously evolving; in order to make this strategy more beneficial and lifesaving, everyone involved in the process should make every possible effort with in mind the best interests of the patients.*

### **INTRODUCTION**

The success of solid organ transplantation as a treatment of end stage organ failure expanded its indications resulting in an increased demand for organs. Despite efforts and numerous strategies applied by the transplant and medical community at large, the gap between demand and supply is widening. As a result, many institutions expanded their live donor programs, including primarily kidney, but also liver and bone marrow, partial pancreas, single or double lung (from 1 or 2 donors) and small bowel. From an historical perspective, the first successful transplant operation involved a live donor kidney transplant between identical twin brothers, carried out by Joseph Murray in 1954, in Boston (Merril et al., 1956); since then, live donation has had variable application in clinical practice. Up until the late 1980s, con-

DOI: 10.4018/978-1-5225-4074-8.ch014

tinuous improvements on immunosuppressive therapy (particularly the introduction of the cyclosporin), and on patient management (pre-, intra- and post-operative), made transplantation from deceased donors a successful therapeutic option; live donor transplantation (mainly kidney) was not performed in the western society, but continued in the developing countries because of lack of legal and societal regulations to use organs from deceased donors. After this era, the rapidly increasing number of patients on the transplant waiting list and the insufficient donor availability forced many centers in Europe and USA to utilize live donors. In the USA, for example, out of 30.974 organ transplants performed in 2015, 24.986 were from deceased donors and 5.989 from live donors. Currently the number of live donor transplants in the USA represents nearly 24% of all transplants (UNOS, 2016). Similar trends are taking place in Europe and Canada. “In the UK, latest statistics show that 42% of all organ donors are living donors and living donor transplantation represents 22% of total transplant activity” (NHS Blood and Transplant, n.d.)

## **LIVE DONATION: ETHICAL STANDPOINT**

Since its inception in the clinical practice more than 60 years ago, live donation has raised a wide range of complex ethical issues for all health professionals involved in the process. This chapter summarizes key ethical principles; a detailed description of the theoretical and philosophical background to the subject can be found in several reviews in the literature (Price, 2009; Price, 2000a; plant et al., 2002; Ross et al., 2002; Kahn & Matas, 2002; Truog, 2005). Organ donation by living donors starts as an amazing act of altruism and presents a unique ethical dilemma, in that physicians must pose at risk a healthy person to save or improve the life of a patient. From the donor perspective, the donation process from a live donor seems to violate the traditional first rule of medicine—*primum non nocere* (above all, do no harm)—because inevitably exposes healthy persons to a risk during the removal of an organ or part of it in order to benefit another person. From the recipient perspective, not only patient survival is markedly prolonged, but also the quality and productivity of life is considerably improved, with decreased cost of health care for the society. For example, the expected survival of a patient with end-stage renal disease treated with kidney transplantation, at 1, 5, 10 years is 20–40% higher than treatment with dialysis. Also, the cost of dialysis is 3 times the cost of kidney transplantation over a 5-year period (Keown, 2001; Eggers, 1998; Hunsicker, 1999; Caplan & Coehlo, 1998). For the above-mentioned reasons, the live donation process has to follow ethically accepted rules and guidelines. The ethical principals include respect for the donor’s autonomy, donor selection and full, voluntary, informed consent (Pruett et al., 2006).

### **Donor Autonomy**

In live donation, the donor comes forward as a consequence of its voluntary decision (Hou, 2000). This reflects the ethical basis of a liberal society in which a consenting adult has a right to make decisions about his or her own body and to refuse medical treatment, even life sustaining. Traditionally a consenting adult has a right of access to a medical procedure only in cases where a physician is willing to cooperate (Levinsky, 1984); this is also the ethical basis of living, genetically related and unrelated, donations. The physician, serving the patient best interest, still poses limitations on the autonomy of the donor (Spital, 2001). It has obviously been considered unacceptable the donation of life saving organs; in other words, to date, there has been no petition to court from a potential live donor to be allowed to donate the heart. In this regard, libertarian theorists are debating weather this prohibition should be absolute (Veatch &

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/living-organ-donation-role-of-ethics-for-improved-clinical-practice/206353](http://www.igi-global.com/chapter/living-organ-donation-role-of-ethics-for-improved-clinical-practice/206353)

## Related Content

---

### Occlusal Considerations in the Hypersensitive Dentition

Nick Yiannios, DDS (2015). *Handbook of Research on Computerized Occlusal Analysis Technology Applications in Dental Medicine* (pp. 358-428).

[www.irma-international.org/chapter/occlusal-considerations-in-the-hypersensitive-dentition/122077](http://www.irma-international.org/chapter/occlusal-considerations-in-the-hypersensitive-dentition/122077)

### Slit Lamp Examination on Pediatric Patients

Alanna Khattar (2022). *The Pediatric Eye Exam Quick Reference Guide: Office and Emergency Room Procedures* (pp. 236-269).

[www.irma-international.org/chapter/slit-lamp-examination-on-pediatric-patients/296168](http://www.irma-international.org/chapter/slit-lamp-examination-on-pediatric-patients/296168)

### Testing Visual Fields in Children

Jacky K. W. Kong (2022). *The Pediatric Eye Exam Quick Reference Guide: Office and Emergency Room Procedures* (pp. 67-85).

[www.irma-international.org/chapter/testing-visual-fields-in-children/296161](http://www.irma-international.org/chapter/testing-visual-fields-in-children/296161)

### The Optimal Workforce Staffing Solutions With Random Patient Demand in Healthcare Settings

Alexander Kolker (2019). *Advanced Methodologies and Technologies in Medicine and Healthcare* (pp. 158-174).

[www.irma-international.org/chapter/the-optimal-workforce-staffing-solutions-with-random-patient-demand-in-healthcare-settings/213594](http://www.irma-international.org/chapter/the-optimal-workforce-staffing-solutions-with-random-patient-demand-in-healthcare-settings/213594)

### The Role of New Technologies During the COVID-19 Syndemic in the Andalusian Health System: Limitations, Challenges, and Lessons Learned

Carmen Rodríguez-Reinado and Alfonso Chaves-Montero (2022). *Handbook of Research on Improving Allied Health Professions Education: Advancing Clinical Training and Interdisciplinary Translational Research* (pp. 91-106).

[www.irma-international.org/chapter/the-role-of-new-technologies-during-the-covid-19-syndemic-in-the-andalusian-health-system/302517](http://www.irma-international.org/chapter/the-role-of-new-technologies-during-the-covid-19-syndemic-in-the-andalusian-health-system/302517)