Applicatum

Organ Transplantation: The Latin American Legislative Response¹

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As medical barriers to human organ transplants have fallen, serious legal and ethical obstacles have emerged. This article provides an overview of those obstacles, taking into account the relevant legislation in force in 16 Latin American countries in 1989.

The author proceeds by considering postmortem and inter-vivos organ donations separately and examining the principal ethical and legal issues relating to each kind. In the case of postmortem donation these deal mainly with donor consent, recipient selection, funding of transplant costs, and possible conflict of interest. In the case of inter-vivos donation they relate again to donor consent and funding as well as to certain other matters—notably donor compensation, commerce in organs, and international sharing of organs.

On the whole it is concluded that the countries of Latin America, together with the nations of the world in general, urgently need to develop more comprehensive legislation on organ procurement and transplantation.

In recent years the world has witnessed major advances in the technology of organ transplantation, defined by Norrie as "the medical procedure whereby tissues of a human body are removed from the body and reimplanted . . . in . . . that of another human being, with the intention that the transplanted tissue should perform in its new position the function it previously carried out" (1).

As medical barriers to organ transplantations (both postmortem and intervivos) have been overcome, legal and

In 1987 the World Health Organization recognized the need for development of guidelines on organ transplantation by adopting World Health Assembly Resolution 40.13 calling for the study of the legal and ethical issues associated with this delicate medical procedure. In general, the importance of legal regulations in organ transplantation make it imperative that this procedure be comprehensively addressed by legislation (2), so as to ensure that the rights of both donor and recipient, whom the Declaration on

ethical obstacles that severely limit the availability of organs have arisen. As these obstacles require fundamental societal decisions, the prospects for transplantation therapy will depend increasingly upon the regulatory environment established by national governments (2).

¹Edited version of a presentation to the International Congress on Ethics, Justice, and Commerce in Transplantation held in Ottawa, Canada, on 20–24 August 1989.

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Human Transplantation of 1987 recognizes as patients (3), are respected and that the main ethical concerns regarding transplantation are met. In light of the vast array of legal and ethical problems raised by the technology of organ transplantation, it is particularly important to determine which issues legislation has chosen to consider, and also which issues are not addressed by law.

This study examines the legislation (including laws, decrees, decree-laws, and legal regulations) governing the procurement and transplantation of human organs in 16 Latin American countries³ on an issue-by-issue basis and reviews policy statements about organ transplantation that have been issued by the World Health Organization.

POSTMORTEM DONATIONS

Concern about postmortem donations tends to focus on (a) the form of consent required of the donor and his or her relatives, (b) recipient selection, (c) determination of death, and (d) conflicts of interest that could arise in the course of the procedure. Another matter, funding, that is of general concern, will be taken up in the section on inter-vivos donations.

Donor Consent

Two main approaches to donor consent are commonly referred to as "affirmative" donor consent and consent based on "required request."

Affirmative Donor Consent

This is the critical concept behind voluntary organ donation. Affirmative consent has contributed to the rapid and relatively noncontroversial adoption of organ transplantation in the countries that use this method. There are essentially three types of organ donation by affirmative consent, these being (1) donation by will, (2) donation by donor card, and (3) donation by presumed consent.

Donation by will. Dickens reports that in former times common law did not allow a person to donate his or her body by will because the body was not considered property in law, and so was not part of the estate governed by the will (4). Today, however, a number of civil law countries such as the Dominican Republic and Costa Rica allow a person to consent to organ donation by will.

Nevertheless, in practical terms this form of donation is highly unreliable, since will provisions are seldom revealed in time for suitable organ donation. The process is further delayed by the obligation to provide the potential recipient with details about the transplant in order for the gift to take effect upon the donor's death (4). Thus, special civil procedures should be enacted to accelerate the opening of such wills when death occurs. This advice is aimed especially at Latin American countries with strong formalistic traditions and those where relatively complex and lengthy procedures required to open a will make organ retrieval wellnigh impossible. Nevertheless, despite these problems, donation by will has an advantage: It is not subject to veto by the donor's relatives (4).

Donation by donor card. This procedure, used in Argentina, Canada, and Cuba, appears to be the best form of voluntary organ donation. Its advantage lies in the fact that the donor carries the card with him or her at all times. Thus, the hospital may search for the card and immediately act upon it, rather than having

³Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, the Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, and Venezuela.

to ask the donor's relatives if a living will exists, and so the efficiency of organ donation is enhanced.

Paradoxically, however, adoption of donation by donor card has contributed to the current organ shortage. To begin with, the procedure tends to be lengthy and impractical. As Cotton and Sandler state, "... first, healthy individuals must contemplate their mortality and make a conscious decision to have their organs surgically removed after their death. Second, these individuals must carry with them at all times a signed card noting this decision. Third, public safety or hospital personnel must locate the document and notify the recovery team in sufficient time for recovery to be organized and accomplished."4

Beyond that, Latin American countries are generally reluctant to address the issue of death in this way, which is culturally regarded as simplistic. And a recent survey in the United States studying the efficiency of this type of system led to the discovery that no state had a procedure to be followed by law enforcement or medical personnel for the routine identification of card-carrying donors.⁵

More generally, a number of Latin American countries with affirmative donor consent legislation establish a hierarchy of consent (usually by the donor's relatives) for donation of the cadaver. Relatives are generally given the power to veto consent from a relative of the same or lower affinity to the decedent. In certain countries, the relatives may not consent to cadaver use if they are aware that the decedent objected to donation.

Such legal sensitivity to the nearest relatives' preferences regarding donation influences medical practice.⁶ Hospitals

and physicians are hesitant to remove organs from donors without family consent, even if the deceased possessed a signed donor card. This reluctance has three basic causes. It stems primarily from a fear of future legal action by the donor's family members, who could, for instance, allege that consent to organ donation was subsequently revoked by the donor. Physicians also say that this reluctance arises from a moral obligation to comply with the wishes of the family regarding the deceased person. Finally, the organ donation community is sensitive to the possibility of bad press arising from a situation where an organ is removed despite family objections, which could jeopardize the voluntary donation system.7

Therefore, even when a signed donor card is found on a potential donor, physicians often verify that close relatives have no objection to the donation. As Dickens states, "keeping faith with the recently deceased represents an important social value."

Presumed consent. The third form of affirmative donation, donation by presumed consent, calls for removing cadaver organs routinely unless objections are raised before removal (e.g., by the donor prior to death or by a relative, provided the deceased did not specifically authorize donation). Presumed consent laws relieve the grieving family from having to deliberate on the physician's request for organs. This form of donation ensures a larger supply of organs than other forms of affirmative donor consent (5).

Obviously, however, physicians hesitate to remove organs without family consent. Therefore, the number of organs available has not increased signifi-

⁴R. D. Cotton and A. L. Sandler (2), p. 64.

⁵R. D. Cotton and A. L. Sandler (2), p. 64.

⁶B. Dickens (4), p. 6.

⁷R. D. Cotton and A. L. Sandler (2), pp. 64-65.

⁸B. Dickens (4), p. 7.

cantly. Also, there is concern that presumed consent circumscribes the individual's right to determine what happens to his or her body, since he or she must take affirmative action to prevent organ removal (6). Furthermore, for presumed consent to be valid, the potential donor must understand what is involved, including the provision that failure to dissent will be construed as consent. This requires widespread education efforts in order to meet minimal legal and ethical standards.

Since 1976 the Council of Europe has been advising European countries to gradually develop their consent laws in the direction of presumed consent for the removal of donor organs. However, this method is not presently utilized in Latin America.

A variation of the presumed consent approach is to acquire organs through the presumed consent/required notification rule. This rule requires that a reasonable effort be made to contact next of kin, so that the latter has the option to refuse donation. Then, if the deceased person did not object to the donation, and if no next of kin or guardian is available after an exhaustive search, the hospital is allowed to remove any needed organ.¹⁰

Required Request

According to Cohen, who uses this term the way it is employed by Arthur Caplan (7), "the primary hindrance to organ donation is not clinical ignorance, financial obstacles, or even legal concerns . . . It is simply a failure to ask" (5). Required request would abolish this failure by obliging hospitals to discuss the possibility of organ recovery with a potential donor's next of kin upon the donor's death. This relieves physicians of the

However, this procedure may be less effective than expected if it becomes perfunctory (4). Prottas feels that required request "flows from a sense that organ procurement more closely resembles a positive obligation rather than a spontaneous act of generosity."

Moreover, physicians may fail to emphasize the need for charitable donations, and so refusal to donate may tend to become automatic.

Recipient Selection

Living donors may designate the recipients of their gifts, and in most cases the donation is made to a relative. But by what standards should postmortem donations, which are generally made without the recipient being specified, be distributed?

It can be argued that morally, donated organs belong to the community. Therefore, they must be allocated equitably among transplant centers and among patients. Following this approach, McDonald suggests "a system of priorities for which several factors can be used to determine which patients on a local list of waiting patients should have the highest priority in receiving an available organ" (8). This is a difficult task, for if the public perceives the distribution policy as unfair or contrary to important social values, it will be reluctant to donate organs (9).

need to decide whether to question a potential donor's relatives about this matter. Thus, as Cotton and Sandler state, "required request preserves the voluntary nature of the system, but forces a decision to be made" regarding donation. In this way, it is hoped, the boost in organ requests will bring about an increase in the number of available organs.

⁹B. Cohen (5), p. 78.

¹⁰ R. D. Cotton and A. L. Sandler (2), p. 65.

¹¹R. D. Cotton and A. L. Sandler (2), p.67.

¹²J. M. Prottas (6), p.191.

There is general agreement that the primary criteria should be medical, and that the two main criteria should be medical need and probability of success. Yet judgments about the probability of an organ transplant's success are debatable. And as Prottas notes, while some contraindications such as mismatched immunologic characteristics have been established, others such as the ability of parents to provide postoperative care are more controversial (10).

In the United States, for instance, an infant known as Baby Jesse was initially refused a heart transplant because doctors felt that "Jesse's young, unwed parents... were incapable of providing him with the exhaustive care he would require after surgery" (11). Yet although family support may be extremely important in postoperative care, the absence of family as defined in traditional terms should not serve as a reason to consider a patient unfit for a transplant.

Also, a conflict sometimes exists between urgency of need and probability of success. In that case, Annas feels, the most crucial thing is to define "clinical suitability" for transplantation in a manner that concentrates upon benefit to the patient in terms of lifestyle and rehabilitation rather than upon simple survival (9).

Besides applying medical criteria, some argue that it is also appropriate to consider the age and social utility of the prospective recipient, i.e., the likely pattern of future services to be rendered by the patient upon recovery. Such standards would be difficult to formulate and adopt; furthermore, they could lead to value judgments about the relative worth of people's jobs and lifestyles. In this connection, one should note Annas' view that "arbitrary patient selection excluders . . . such as income, age, and personal habits" should be shunned altogether (9).

In addition, unlike social utility, lifestyle is already taken into consideration in selecting patients, under the category of medical utility. That is, it is not deemed unjust to assign priority to transplant candidates whose lifestyles contributed significantly to their end-stage organ failure. Knowledge of a patient's lifestyle may also be useful in predicting the probability of success of the transplant. For example, continued heavy use of alcohol would greatly reduce the likelihood of a successful liver transplant. Yet it may be difficult to effectively apply such criteria, because the connection between a recipient's disease and his or her lifestyle can seldom be proved irrefutably.

To counter these various problems, medical criteria must be adopted that are objective and independent of social worth categories. Annas suggests the adoption of uniform medical screening criteria to be reviewed and approved by an ethics committee with significant public representation (9).

Most Latin American countries do not specify recipient criteria in their legislation on organ transplantation—beyond general requirements of medical need, compatibility, and relationship to the donor. However, despite the fact that ongoing development of medical technology makes defining workable criteria difficult, countries should consider enacting provisions indicating criteria that would be considered inappropriate.

Determination of Death

Until fairly recently, death was traditionally defined as cessation of cardiorespiratory function (12). However, as medical technology developed, artificial respirators began being used to maintain individuals after severe injury. It soon became apparent that there was another use for the respirator beyond sustaining a

person's life; namely, in a case of severe neurologic injury from which recovery was impossible, the patient's organs could best be preserved for transplantation by keeping them in the body where they grew and maintaining them through artificial support systems (6). Therefore, it became necessary to define death in terms of brain function.

Legislation currently employs three general approaches in defining death: (1) No criteria are defined, and death is determined by ordinary or accepted medical practice; this approach is used in Costa Rica, Cuba, Mexico, Venezuela, and most provinces of Canada. (2) Death is defined as brain death; this is done in Chile and Colombia, and also under the terms of a 1987 law in Bolivia. (3) Sequential definitions are used that include brain death; this is done in Ecuador, Panama, and Peru (13).

Approach (1) is adequate where a common law system is followed (i.e., within this hemisphere in Canada, the United States, and the English-speaking Caribbean). In such countries there is less need for legislation on organ transplantation, thus facilitating organ recovery (2).

Approaches (2) and (3) are more characteristic of countries using a civil law system-among them all the countries of Latin America. Dickens considers definition (2), which depends on purely neurologic criteria, to be limiting in that it requires repetition of tests at least 24 hours after the initial determination of irreversible coma. He finds that "this may be desirable where coma originates . . . in drug overdose or when a patient is in shock, but less so in more obvious cases, such as severe trauma." Delay in determination of death may unnecessarily prejudice the suitability of tissues for organ transplant without affording benefit to dying patients. "Furthermore," Dickens continues,"... this may be a demanding test to satisfy . . . by physicians in small towns [who often lack] convenient access to complex machinery . . . necessary to . . . conduct such tests." (13)

Approach (3) permits application of a brain test only to patients who are receiving artificial life supports. The test has the advantage of reducing physicians' discretion when patients have lost brain function but have retained other systemic functions (13).

Conflict of Interest

"Medical ethics," Dickens feels, "require that physicians involved with death of persons who may be suitable organ donors after death should not be, nor appear to be, caught in a conflict of interest. . . . Their practice should not be tainted by the suspicion that their concern for patients is distracted by thoughts of the benefit death may represent to potential recipients of organs," a suspicion that could cause voluntary organ donations to substantially decrease. 13

Accordingly, in most Latin American countries legislation ensures that physicians responsible for determining death do not belong to a transplant team. Only two countries, Ecuador and Paraguay, are silent on this subject. According to Dickens, this measure also spares a dying patient the indignity and discomfort of being taken to die in a facility where organ retrieval can be undertaken conveniently. However, "it has the effect," Dickens continues, "of relieving the physician dealing with the family at death of the patient from any responsibility to address the question of organ donation."14 This is a disadvantage, in that it requires hospitals to assign this responsibility to another person, although it is the aforementioned physician who must notify

¹³B. Dickens (4), p.5.

¹⁴B. Dickens, (4), p.5.

the authorities that a donor is available once death has occurred.

INTER-VIVOS DONATIONS

Concerns about inter-vivos donations tend to focus on four key points: (a) donor consent, (b) funding and donor compensation, (c) commercialization, and (d) international sharing of organs.

Donor Consent

The removal of healthy organs from living patients presents a number of unique legal questions, because it is a surgical procedure generally performed "for the therapeutic benefit not of the donor but of another person." In Norrie's view, the main concern in the case of competent adult donors is ensuring that informed consent is voluntarily given. 15 When the donor is a minor, or is mentally or legally incompetent, difficult issues arise.

According to Cotton and Sandler, "the doctrine of informed consent derives from a tradition of patient self-determination within the context of the physicianpatient relationship. . . . Informed consent is achieved when a physician meets the duty to adequately disclose to the patient the nature of the proposed treatment or procedure, the risks involved therein, available alternatives, if any, and the reasonable benefits to be expected" (2). Most Latin American countries require that the potential donor give written consent to the procedure. However, he or she may withdraw this consent up to the time of the operation without incurring any legal consequences. This allows the donor to consider his or her decision carefully; it also protects the physician and the hospital by providing a

legal record of consent, should the donor regret his or her decision after the operation.

Most countries only permit written consent to organ donation by soundminded donors over the age of majority. Primarily, this decision arises from concern that minors and mentally (or in some cases legally) incompetent individuals will not fully appreciate the consequences of the operation and could be easily swayed or taken advantage of in order to benefit a potential recipient. Thus a number of countries, notably Bolivia and Mexico, prohibit minors, mental incompetents, prisoners, and pregnant women from donating organs. Certain other countries, including Argentina, allow some forms of donation by such persons, but also attempt to provide safeguards for the individuals at risk.

Total prohibition, according to Sharpe, may be too severe in this situation, in view of the current, and probably ongoing, scarcity of organs (14). Therefore, donor requirements should be rendered more flexible in order to meet the need for organs, especially in the case of children, who require organs that closely approximate the size of the diseased organ. Hence minors, and for similar reasons mental incompetents, should be allowed to donate, provided controls are imposed to prevent abuse. Likewise, it seems paternalistic of certain countries to classify pregnant women as incapable of donation. However, prohibition of organ donation by prisoners to people outside their families may be justified by the concern that they might be induced to donate organs for early parole, a situation that has reportedly occurred in the Philippines.

Funding and Donor Compensation

Something that must be considered in both postmortem and inter-vivos trans-

¹⁵K. M. Norrie (1), p.453.

plantation is the simple fact that an organ transplant is a very expensive proposition. In 1985 the one-year cost of a heart transplant in the United States ranged from US\$170,000 to \$200,000, a liver transplant in the same country cost between \$230,000 and \$340,000, and immunosuppressive therapy, which must be continued for life, cost approximately \$6,000 per year (9). These prices put transplant operations beyond the reach of most people unless they are privately insured. Therefore, McDonald supports government funding of organ transplantation, so that "all recipients would have equal access to available organs and would be equitably treated" (8). It should be noted, however, that in providing organ transplantation services, the government may be forced to displace other, higher priority health care services (9). This type of dilemma would tend to be especially acute in poorer, less developed countries.

Also, while the foregoing procedure is egalitarian in principle, Dickens feels that "the presumption . . . that government may properly deny wanted services to persons with the means to acquire them . . . is open to ethical challenge" (15). Denial of the use of organ transplantation services must thus be based on more profound objections than mere inequality of opportunity for others.

Regarding compensation to donors, it is generally felt that donors should not incur any kind of expenses related to the removal of the donated organ. This principle is different from that which supports the donation of organs itself, which is gratuitous. A number of countries, notably Canada and Panama, provide public funding of the recipient costs associated with organ transplantation. In other countries (including Argentina) the law ordains that the recipients' social security shall cover the donor's expenses. Yet, interestingly, none of the legislation re-

viewed provides a definition of the term "expenses."

Cotton and Sandler suggest that donor compensation should include both lost earnings and expenses incurred by the donor in connection with the organ donation (2). The former covers wages, salaries, and associated benefits accorded by specific labor legislation. The latter covers expenses for six sorts of items: examinations preceding the donation, logistical costs (for transportation, housing, and meals), surgical removal of the organ or organs, patient recovery, insurance coverage for immediate and future risks, and insurance coverage for damage that may result from the organ's removal.

Commercialization

Demand for organs currently exceeds supply and will likely continue to do so, especially with the further development of medical technology. Given this circumstance, the sale of human organs is likely to flourish unless strongly deterred by legal or ethical controls.

Such a market could alleviate the shortage of organs and tissues, thus saving and improving the quality of more lives. It would also respect the freedom of individuals to do as they wish so long as they do not harm others.

Yet Professor Dickens finds "the prospect of a free commercial market in organs . . . morally intolerable . . . it would favor well-insured or rich recipients over poor, and induce the poor . . . to sell their body tissues," a situation reported to occur in Bombay (15). Furthermore, there is concern that the existence of such a market would eliminate all current voluntary organ donations and reduce the "altruistic" nature of our society regarding human health (14).

Commerce in organs, i.e., both forprofit transactions and international trade of human organs (especially live kidneys from developing countries), for transplant purposes has been widely condemned, in both international fora and most of the national legislation involved. The most relevant international declarations are the Statement on Live Organ Trade by the 37th World Medical Assembly (Brussels, October 1985-16) and World Health Assembly Resolution 42.5 of 1989 (17). A number of Latin American countries have specific legislation that prohibits the sale of organs. Certain other countries-notably Brazil, the Dominican Republic, Paraguay, Peru-do not expressly prohibit it, and so the practice is not barred by law.

International Sharing of Organs

The matching of available organs to the best possible recipients based on immunologic criteria has been an important factor in increasing graft survival in recent years. This situation encourages measures calling for international sharing of organs, a development that would increase the likelihood of a perfect match between donor and recipient. In that event, human organs would no longer be viewed as a scarce national resource, but rather as a scarce international resource.

In a voluntary system of organ donation, it seems appropriate to assign priority to citizens of the country in which the organ was donated, but it may be commendable to share organs with nonimmigrant aliens. (Only one country, Colombia, expressly prohibits the international sharing of organs, while Canada and the United States already appear to have an informal reciprocity agreement that allows citizens of either country to be recipients of organs donated in the other country.) Overall, there appear to be strong moral arguments for sharing organs with other countries and participating in a system marked by reciprocity.

Eventually, as the technology of organ transplantation advances and the rate of organ donation increases in other countries, an exchange program may become feasible on an international scale.

CONCLUDING REMARKS

The study upon which this article is based has explored the current legal regulation of organ transplantation in many Latin American countries. It is immediately apparent that very few of the countries involved have comprehensive legislation in this area. And while certain countries have made provision in their legislation for passage of regulations, as of 1989 they had failed to draft such regulations. Also, some Latin American countries (including Costa Rica) still follow the cumbersome procedure of donation by will, which incurs excessive delays making organ retrieval almost impossible. In addition, Latin American legislation needs to consider the donation potential represented by minors and certain incompetents, despite the ethical debate that surrounds the right of these individuals to become donors.

Regarding commerce in human organs, it is true that society has a duty to encourage the availability of sufficient organs and also that considerable legal advances are needed in the organ transplant field. Nevertheless, the solution to the organ shortage does not lie in commercialization. Among other things, such commerce would discriminate against those who do not possess adequate financial means for acquiring the needed organ.

On the other hand, a lack of distinction between commerce in organs and compensation of donors for related costs has created a legislative and regulatory vacuum of considerable importance. The resulting absence of a legal base for donor compensation, besides failing to encourage donations, makes it very difficult to conduct adequate information and education campaigns pertaining to organ donation and donor rights (1). Regrettably, this vacuum makes the matter of compensation subject to private understandings between donors and recipients.

As the foregoing indicates, organ transplant technology has raised a number of important ethical and legal issues. In seeking to ensure that the principal issues among these are addressed, the World Health Organization has recommended that guidelines be promulgated to help countries develop more comprehensive government legislation on organ procurement and transplantation (2). Such comprehensive legislation is clearly needed, for as Gerson points out, "ultimately, the potential for organ transplantation will depend not only on advanced medical technology, but also on progress in the legal technology of organ donation" (18). This observation is relevant for the nations of Latin America.

Acknowledgments. I would like to express my deepest gratitude to Ms. Leslie Creeper of Canada, Ms. Maud Calegari of France, and Ms. Ana María Linares of Colombia for their collaboration on this study.

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Annex 1. Legal sources.

Country	Reference	Date	Abbreviation used
Argentina	Law 21,541	21 March 1977	L77
Argentina	Law 23,464 (amendment to Law 21,541 of 21 March 1977)	23 March 1987	L87
Argentina	Decree 397/89	28 March 1989	D89
Bolivia	Decree Law 15,629	18 July 1978 (summary)	DL78
Bolivia	Regulations	March 1982 (summary)	R82
Brazil	Law 4,280	6 November 1963	L63
Chile	Law 18,173	15 November 1982	L82
Chile	Regulations	3 December 1983	R83
Colombia	Law 9	January 1979 (summary)	L79
Colombia	Decree 2,363 (superseded by Law 73 of 20 December 1988; no new provisions have been adopted)	25 July 1986	D86
Costa Rica	Law 5,560	20 August 1974	L74
Cuba	Law 41	13 July 1983	L83
Dominican Republic	Law 391	1 December 1981	L81
Ecuador	Law 64	15 June 1987	L87
Guatemala	Decree 45-79	9 August 1979 (summary)	D79
Guatemala	Regulations	7 October 1986	R86
Honduras	Decree 131	7 June 1983	D83
Mexico	Sanitary Code	26 February 1973	HC73
Mexico	Regulations	16 August 1976	R76
Panama	Law 10	11 July 1983	L83
Paraguay	Law 836/80	12 December 1980 (summary)	L80
Peru	Law 23,415	4 June 1982	L82
Peru	Regulations	6 May 1983	D83
Venezuela	Law 72	28 August 1972	L72

Annex 2. Organ donations between living persons.

Legal reference		Consent of the donor		
by country	Regenerating organs	Nonregenerating organs	Incompetence	Recipients
Argentina: L77	Excluded	Over 18 years of age Consent of a legally compentent donor	If the donor is mentally incompetent, relatives can give the required consent	Depends on relationship to the donor: parents, children, and siblings; on an exceptional basis, spouse and adoptive children
L87	Over 18 years of age Consent of a legally competent donor	Over 18 years of age Consent of a legally compentent donor	a	Depends on relationship to the donor: parents, blood-related siblings; on an exceptional basis, spouse, adoptive children, relatives to the second degree of consanguinity, and collateral relatives to the fourth degree of consanguinity
D89	Written informed consent of donor and recipient Donor must specify the organs that he/she wishes to donate	Written informed consent of donor and recipient Donor must specify the organs that he/she wishes to donate		
Bolivia: DL78 ^b	Consent of a mentally and legally competent donor	Donor consent	Minors and mentally incompentent persons Prisoners can only donate to relatives	
R82 ^b	Consent of the donor in the presence of a notary public	Consent of the donor in the presence of a notary public	Minors and mentally incompentent persons Prisoners can only donate to relatives	
Brazil: L63		•••	•••	

Chile: L82	Over 18 years of age Written informed consent by a legally competent donor or a married female donor	Over 18 years of age Written informed consent by a legally competent donor or a married female donor		
R83	Written consent of a legally competent donor or a married female donor	Written consent of a legally competent donor or a married female donor		
Colombia: L79	Donor consent	Donor consent		
D86 ^b	Over 18 years of age Written consent of the donor	Over 18 years of age Written consent of the donor	Minors and prisoners	
Costa Rica: L74	Of legal age Written consent of the donor in the presence of two witnesses			Depends on relationship to the donor: relatives to the fourth degree of consanguinity or third degree of kinship, and spouse
Cuba: L83		Pursuant to regulations of t	he Ministry of Public Health	
Dominican Republic: L81				
Ecuador: L87	Consent of a legally competent donor	Consent of a legally competent donor	Mentally incompetent persons	Depends on medical necessity and compatibility
Guatemala: D79				
R86 ^b	Over 18 years of age Written consent of the donor and recipient	Written consent of the donor and recipient	Minors, mentally incompetent persons, prisoners, and unconcious persons	Depends on medical necessity, compatibility, and age (preferably under 55 years of age)
				(Continues)

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Legal reference		Consent of the donor		
by country	Regenerating organs	Nonregenerating organs	Incompetence	Recipients
Honduras: D83 ^b	Over 21 years of age Voluntary consent of a donor in full possession of his/her mental faculties	Over 21 years of age Voluntary consent of a donor in full possession of his/her mental faculties	Unconcious persons	Depends on relationship to the donor: siblings
Mexico: HC73 ^b	Excluded	Written consent of the donor	Minors, mentally incompetent persons, and prisoners	Depends on Ministry of Health procedures
R76 ^b	Written consent of the donor signed in the presence of two witnesses over 18 and under 60 years of age		Minors, mentally incompetent persons, and prisoners	Depends on relationship to donor (preferably first-degree relative), medical necessity, and age (under 60 years)
Panama: L83	Written consent of the donor		Minors, incompetent persons, and those who cannot exercise their full legal rights	Depends on medical necessity
Paraguay: L80 ^b	Written consent of the donor		Detainees and mentally incompetent persons	
Peru: L82	Written consent of the donor			Depends on medical necessity
D83				
Venezuela: L72	Written consent of a donor in full possession of his/her mental faculties Only parents, children, and siblings of the recipient can donate			Depends on relationship to the donor: parents, adult children, and adult siblings

 [&]quot;...The law does not address this matter specifically.
 Pregnant women cannot donate.

Annex 3. Commerce.

Legal reference	Prohibition of	Penalty		
by country	commerce	Fine	Jail	Comments
Argentina:				
L77	Yes	a	Yes	•••
L87	Yes		Yes	
D89	•••			•••
	•••		•••	
Bolivia:				
DL78	Yes	***	•••	Commerce prohibited except when authorized for charitable purposes
R82	•••	•••		· · · · · · · · · · · · · · · · · · ·
Brazil:				
L63	***			
Chile:				
L82	Voc			Acts or contracts for profit are null and void
R83	Yes	•••	***	Acts of contracts for profit are fruit and void
KOS	Yes	•••	•••	
Colombia:				
L79	Yes	•••	•••	•••
D86	Yes	Yes	•••	Commerce is prohibited except for reasons of
				grave public disaster or human solidarity
Costa Rica:				
	Yes	Voc		Commerce is recorded as a referring the
L74	res	Yes	•••	Commerce is regarded as profaning the deceased and is punishable under the criminal code
Cuba:				
1.83		Pursuant to	o regulatio	ns of the Ministry of Public Health
Danisiana			•	·
Dominican				
Republic:				
L81	***	•••	•••	•••
Ecuador:				
L87	Yes	Yes		Acts or contracts for profit are null and void
c				•
Guatemala:				
D79	•••		•••	
R86	Yes	•••	•••	•••
Honduras:				
D83	Yes	Yes	Yes	***
Mexico:				
HC73		•••	•••	•••
R76	Yes	•••	•••	•••
Panama:				
L83	Yes			***
Paraguay: L80	•••			
	•••	-**	•••	
Peru:				
L82	•••	•••	•••	•••
D83	•••	•••	•••	•••
Venezuela:				
L72	Yes	Yes	•••	
	es not address this matte			***

a ... = The law does not address this matter specifically.

Annex 4. Donor compensation.

Legal			Payment made	by:	
reference by country	Compensa Lost income	tion for: Expenses	Social Security	Recipient	Comment
Argentina:	2030 111001110	Едрение	- Journey	Recipient	Comment
Ľ77	^a	Yes	Yes	Yes	The donor is exempt from all payment or re- imbursement of costs relating to surgery
L87	•••	•••		•••	•••
D89	•••	•••	Yes		•••
Bolivia:					
DL78	•••	•••			
R82	•••		•••	•••	•••
Brazil:					
L63	Yes		The Ministry of Health pays for indigents	Yes	
Chile:					
L82	•••	•••	•••	•••	•••
R83	•••	•••	***	•••	***
Colombia:					
L79	Yes	•••	Yes	•••	•••
D86	***	•••	Recipient or persons responsible for recipient		
Costa Rica:					
L74	•••		•••		***
Cuba: L83	Pursua	nt to regulatio	ons of the Ministry of Public	Health	
Dominican Republic: L81					
	***		•••	•••	•••
Ecuador: L87			···		
Guatemala:					
D79	•••	***	•••		•••
R86	•••	•••	•••		•••
Honduras: D83					•••
Mexico:					
HC73	•••		***	•••	•••
R76	•••			•••	
Panama: L83	Yes	Yes	•••		Donor and recipient are
					entitled to free medical treatment
Paraguay: L80	•••		•••		•••
Peru:					
L82	•••		•••		•••
D83	•••		***	•••	•••
Venezuela: L72					

a ... = The law does not address this matter specifically.

Annex 5. Determination of death.

Cessation of brain function To be established in a regulation (not yet adopted)	A clinician, a neurologist or neurosurgeon, and a cardiologistab	Qualified
(not yet adopted)	^b	
Cessation of brain function	A clinician and a neurologist or neurosurgeon; ^a the death certificate must be signed by the second, as well as by members of the family present at the time of death	Qualified
Current diagnostic methods	Two physicians ^a	Qualified
Cessation of brain function	Three physicians ^a	Qualified
	The director of the hospital or his legal representative	
Absence of brain function	Two surgeons, at least one of whom must be a neurologist or neurosurgeon	
	Two physicians ^a	Qualified
Cessation of brain function	Two physicians ^a and one of the physicians who is to perform the transplant	Qualified
Confirmed by appropriate procedures	Two physicians ^a	Authorized
Pursuant to regu	lations of the Ministry of Public Health	
	Three physicians	Specialized in organ transplant
	Cessation of brain function Absence of brain function Cessation of brain function Confirmed by appropriate procedures Pursuant to regu	second, as well as by members of the family present at the time of death Current diagnostic methods Two physiciansa Three physiciansa The director of the hospital or his legal representative Absence of brain function Two surgeons, at least one of whom must be a neurologist or neurosurgeon Two physiciansa Cessation of brain function Two physiciansa and one of the physicians who is to perform the transplant Confirmed by appropriate procedures Pursuant to regulations of the Ministry of Public Health

Annex 5. (Continued)

Legal		Physicians responsible	
reference	Definition of	for determining	Hospital
by country	death	death	situation
Ecuador:			
L87	Absence of cardiac, respiratory, and brain function		Authorized
Guatemala:			
D79			Public or private, but must comply with the regulations
R86		Three physicians (surgeons)	•••
Honduras:			
D83		A neurologist or neurosurgeon and a cardiologist or internist	Authorized
Mexico:			
HC73	Certified by methods established by the Ministry of Health and Welfare	Two physicians ^a	Authorized institutions
R76	•••		Qualified
Panama:			
L83	Irreversible cessation of spontaneous respiratory and circulatory functions; cessation of spontaneous brain function, if artificial support measures are used	Three physicians ^a	Authorized
Paraguay: L80			Qualified
LOU	•••	•••	Quanned
Peru:			
L82	Cessation of brain activity or cardiorespiratory function	Three physicians	•••
D83	Cessation of brain or cardiovascular activity	Medical board: the director of the hospital, a neurologist, and the chief physician	•••
Venezuela:			
L72	Appropriate procedures	Three physiciansa	Authorized

^a The physicians indicated cannot be members of the transplant team. ^b ...=The law does not address this matter specifically.

Annex 6. Postmortem organ donation.

Legal reference by country	Donation requirements	Order of consent for donation of the cadaver ^a	Use of cadaver in medico-legal cases
Argentina: L77	Over 18 years of age Written consent of a legally competent donor	Spouse, adult children, parents, siblings (adults), grandparents and grandchildren, relatives to the fourth degree of consanguinity, or relatives to the second degree of kinship	ь
L87	Over 18 years of age Consent by a donor in full possession of his/her mental faculties	Spouse, adult children, parents, siblings (adults), grandparents and grandchildren, relatives to the fourth degree of consanguinity, or relatives to the second degree of kinship	
D89	Written consent of the donor and recipient	If no relatives are present at the time of death and if the Sole Coordinating Center for Organ Removal and Implants agrees, the cadaver may be used	
Bolivia: DL78	Donor consent	Legally authorized relative The cadaver may be used if it has been abandoned	
R82	Written consent If the cadaver is to be embalmed or cremated, it may be used automatically	Legally authorized relative If the cadaver has been abandoned, the hospital director may authorize its use	With the authorization o the health authorities
Brazil: L63	Written consent of the donor	The donor's spouse, relatives to the second degree of consanguinity, religious institutions, or persons legally responsible for the donor	
Chile: L82	Written consent of the donor	The cadaver may be used if it has been abandoned, or with the consent of relatives to the first degree of consanguinity or the donor's spouse	

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Legal reference by country	Donation requirements	Order of consent for donation of the cadavera	Use of cadaver in medico-legal cases
R83	Written consent of a legally competent donor or of a married female donor	The cadaver may be used if it is not claimed within two hours of death, or with the consent of the donor's spouse or legitimate parents	
Colombia: L79	Donor consent	A legally authorized relative may give consent The cadaver may be used if it has been abandoned	
D86	Donor consent	Spouse, relatives to the fourth degree of consanguinity, relatives to the second degree of kinship, or adopted parents or children	
Costa Rica: L74	Written consent of the donor	Spouse, adult children, parents, adult siblings, or the hospital director	With the authorization of the coroner
Cuba: L83	Pursua	ant to regulations of the Ministry of Public Health	
Dominican Republic: L81	Written consent of the donor in his/her will		
Ecuador: L87	Consent of a legally competent donor or a married female donor	Spouse, children, parents, or siblings	
Guatemala: D79		The cadaver may be used if the relatives agree, or if it has been abandoned	
R86	Written consent of the donor	If the donor consents while alive, upon death the cadaver may be used without need of relatives' consent	

Honduras: D83	Written consent of a legally competent donor	Spouse, adult children, parents, adult siblings, or grandparents	
Mexico: HC73	Written consent of the donor		
R76	Written consent of the donor	Relatives If the cadaver has been abandoned, it may be used without consent	
Panama: L83	Donor must be of legal age Written consent by a donor in full possession of his/her mental faculties If the donor is a minor, the minor's guardian must consent	Spouse, adult child, parents, the person who determines the disposition of the cadaver If the cadaver has been abandoned, it may be used without consent	Corneas only
Paraguay: L80	Written consent of the donor		
Peru: L82	Written consent of the donor If death occurs in a health center, organs may be removed without consent unless the donor has recorded his/her objection in the Register	Parents, children, or spouse	
D83	Voluntary written informed consent of the donor	Whether consent has been given [by the donor] or not, it can be given by parents, spouse, or children	
Venezuela: L72	Written consent of the donor	Spouse, adult children, parents, or siblings	If the cause of death is definitely known, organs may be removed

a Persons who may give consent in the absence of consent or objection.
 b ... = The law does not address this matter specifically.