

## **Global Organ Donation Policies Around the World**

By Lori Hartwell

A limited supply of organs continues to hinder organ transplantation around the world. A significant percentage of potential organ donors are lost either to medical failure, or through an inability to obtain consent for donation. More than one million people in the world have benefited from organ transplantation and it remains the primary treatment for end-stage renal disease. Following transplantation, a number of patients have survived for well over 25 years. Many organ transplant programs show success rates greater than 70% for transplant recipients over a five-year period.

In the 1960s and '70s, most countries used the policy of voluntary "opting-in" to govern organ donation. Individuals had to specify their intention to donate *before* their kidneys could be legally removed. In the 1980s, however, with mounting dissatisfaction over the small number of kidneys obtained in this way, a number of countries abandoned the opting-in system in favor of the "opting-out" idea involving "presumed consent." In addition, some nations have considered a third policy; "pure presumed consent." Here is a summary of each of these three policies:

### **OPTING-IN SYSTEM/FAMILY CONSENT**

Opting-in is the current United States policy. It requires explicit consent from the donor (by signing the uniform donor card given by the DMV) and/or his relatives in the event that the prospective donor has failed to indicate his desire to donate during his lifetime.

### **PRESUMED CONSENT OR OPTING-OUT SYSTEM**

Singapore first used this program and several European nations soon followed its example. Presumed consent (frequently referred to as opting-out), permits organ and tissue removal unless the donor had explicitly opposed donation during his lifetime.

In the strong version of presumed consent, there is no allowance for the donor's family to interfere with the

donation process. In state initiatives in Pennsylvania and Maryland, a variant of the weak version is being considered. A weak version of presumed consent requires the permission of the donor's family—if the family can be located—before organs and tissues are removed.

Three years after the approval of the Belgium Transplant law, which implemented presumed consent, kidney donations doubled from only 20 kidneys per million population (PMP) to 40 kidneys PMP in 1989.

The latest statistics from Eurotransplant (January-July 1999) confirm these findings: Austria and Belgium (the two opting out countries in Eurotransplant), again showed a more than 30 percent increase compared to the previous year. Germany and the Netherlands (opting in) again downwards with more than 15 percent.

## **SPAIN**

Spain operates with presumed consent for organ donations and half the transplant coordinators are doctors, said Dr. Marti Manyalich, transplant procurement manager at Spain Transplant Services Foundation. While presumed consent is the norm, families are still asked if their loved ones will be organ donors.

Spain might attribute some of its success to another factor. "Active detection is the key to the Spanish model," Dr. Manyalich said. Active detection in this case means having transplant coordinators visit emergency rooms and the ICU on a daily basis, checking the roster of patients and their status.

Dr. Manyalich reported that Spain has seen its waiting list and waiting time reduced and its rate of donations increase. While its refusal rate from families is significantly lower than that in the U.S., The United Network Organs Sharing (UNOS) sees 21 donations PMP, while last year, some parts of Spain saw donations as high as 39 PMP.

## **PURE PRESUMED CONSENT**

The "pure presumed consent" law means that a person must register at a courthouse and establish that he or she does not wish to be an organ donor. Such

registration is the only way individuals can prevent their organs from being removed at death. However, if a person who refused to be a donor ends up needing a transplant, he would automatically be placed at the end of the list. Those who wish to receive an organ must be willing to give one.

Austria practices pure presumed consent. There's also the difference between organs and tissues. In Belgium, they practice the pure presumed consent law for tissues without approaching relatives at all. Although hospitals inform relatives about organ procurement as a routine procedure, they do so to explain the delay between (brain) death and the moment the corpse becomes available for burial.

### **SELLING OF ORGANS**

Recently, an advertisement appeared on the Internet offering a kidney for sale. This advertisement raised the issue of the ethics of selling organs. The United States has settled this matter: Federal law forbids this type of sale.

There have been recent reports of organs legally sold in the Philippines for as little as \$2,000. Such a policy exploits poor people by tempting them to sell one of their kidneys. In India, fathers sell their own kidneys, so they will have money for a dowry for their daughters. It also is reported that China removes organs from criminals shortly after executing them and then sells them.

Because the concept of financial incentives fundamentally changes the process of organ procurement, it has been argued that the term "donor" is no longer applicable and would need to be replaced by a term such as "vendor."

Pennsylvania has initiated a pilot program, whereby families of a deceased person are paid \$300 following consent for organ donation. All monies go directly to the funeral home of choice. However, this practice is considered by some to be an incentive rather than a donation.

### **BRAIN DEATH**

Japan has been slow to follow this area of medicine. Japanese ethics, deeply rooted in religion (especially

the Shinto religion) and tradition, have affected their outlook on life and death. Because the Japanese have only recently started to acknowledge the concept of brain death, transplantation of major organs has been hindered in that country. Currently, there is a dual definition of death in Japan, intended to satisfy both sides of the issue. This interesting paradox, still not fully resolved, illustrates the contentious conflict between medical ethics and medical progress in Japan.

### **MEDICAL LEGAL LAW-MARKERS**

Transplantation constitutes a rapidly changing field for lawmakers. Until two or three decades ago, there were no laws governing organ transplants. Politicians have passed several laws in order to catch up with the expeditious scientific progress. Transplantation is a definite medical process that requires a definite legal response.

We stand at a crossroads, since the more organ transplant recipients we have, the more there is a need for immunosuppressant medication. In Australia, for instance, a transplant recipient pays about \$20 per medication (a clearly affordable amount). In the United States, it is a very different scenario, with medications costing an average of \$600 - \$1,000 per month. After kidney transplant recipients reach the three-year mark of Medicare, the recipient is left to find adequate health coverage and a prescription plan. If unable to find adequate health insurance, the recipient is forced to look at other alternatives like welfare, permanent disability, or the underground to obtain the life-saving medication.

Currently the United States Congress is debating if immunosuppressant medication is to be guaranteed for life to the transplant recipient. This is in the form of two pieces of legislation (HR 1115 and SB 631) seeking immunosuppressant drug coverage for the lifetime of an organ. This legislation makes a great deal of sense, since it takes considerably less to financially maintain a kidney transplant recipient than it does to maintain a dialysis patient.

### **INCREASE NEED FOR ORGANS**

The need for organ transplants has increased 200 percent over the past decade in the United States, while the number of organ donors has remained

relatively constant. A family's refusal to consent to organ donation has been cited as one of the key factors in the shortage of organs. Why do families refuse to consent? Experts have cited a lack of understanding about brain death and organ donation. Families of potential organ donors are receiving inadequate information to make informed choices about organ donation.

## **THE REALITY**

The process leading from donation to transplant is complex and is influenced by many factors, such as legislation, training, public attitude, and cost. These factors also influence organ donation. The worldwide shortage of donated organs is the major challenge currently facing transplant programs around the world.

In the absence or shortage of dialysis in large parts of the developing world, transplanted organs represent the only means of treating end-stage renal disease. Thus, a clear ethical conflict arises: Should we allow individuals to die or adopt new strategies for obtaining organs?

## **Bibliography:**

1. Ann N Y Acad Sci 1998 Dec 30; 862: 129-143
2. UNOS Website 1999
3. Roels Annals of Transplantation Vol 1, No. 4, 39-43
4. McConnell JR 3<sup>rd</sup> J Med Ethics 1999 Aug; 25 (4): 322-4 5. Carmi A Med Law 1996;15 (2): 341-9
6. Beaulieu D J Neurosci Nurs 1999 Feb; 31 (1): 37-42

## **Acknowledgment**

A special thanks to Leo Roels, who provided valuable information to complete this manuscript. Roels is the immediate past president of the European Transplant Coordinators Organization and founding board member and Scientific Program Director of the International Transplant Coordinators Society and currently serves as the assistant manager of the Donor Action Foundation, Cambridge, U.K.

From December 1999 issue of *Contemporary Dialysis & Nephrology*. Reprinted with permission.