

# Prisoners on Death Row Should Be Accepted as Organ Donors

Shu S. Lin, MD, PhD, Lauren Rich, RN, BSN, Jay D. Pal, MD, PhD, and Robert M. Sade, MD

Departments of Surgery, Immunology, and Pathology, and the Duke Lung Transplant Program, Duke University Medical Center, Durham, North Carolina; Department of Cardiothoracic Surgery, University of Texas Health Science Center, San Antonio, Texas; and Department of Surgery and Institute of Human Values in Health Care, Medical University of South Carolina, Charleston, South Carolina

## Introduction

Robert M. Sade, MD

Ten years ago, Christian Longo had been deeply entangled in a career of minor crimes and crushing financial burdens that had led to bankruptcy. He saw only one way out: relieving his family, his wife Mary Jane and their three children, of their dependency on him. He strangled Mary Jane and 2-year old daughter Madison, put them into suitcases and threw them into Yaquina Bay in Newport, Oregon. He stuffed his 3-year old daughter Sadie and 4-year old son Zachery into pillowcases, weighted them down with rocks, and threw them, still alive, into a nearby pond where they drowned.

His crime was discovered when Zachery's body floated to the surface of the pond. He was placed on the FBI's 10 most wanted list, was found 2 years later living with his girlfriend in Cancun, Mexico, and was arrested, brought back to Oregon, put on trial, found guilty on four counts of murder, and sentenced to death.

In March 2011, Longo wrote an editorial that was published in the *New York Times*: "Giving life after death row [1]." The editorial began with these words: "Eight years ago I was sentenced to death for the murders of my wife and three children. I am guilty. I once thought that

I could fool others into believing this was not true. Failing that, I tried to convince myself that it didn't matter. But gradually, the enormity of what I did seeped in; that was followed by remorse and then a wish to make amends."

He continued: "There is no way to atone for my crimes, but I believe that a profound benefit to society can come from my circumstances. I have asked to end my remaining appeals, and then donate my organs after my execution to those who need them." He went on to say, "And yet, the prison authority's response to my latest appeal to donate was this: 'The interests of the public and condemned inmates are best served by denying the petition.'"

Longo claimed that half of the other inmates on death row wanted to do the same and that there was no valid reason to prohibit them from donating. The question of who was right, the condemned prisoner or the prison parole board, was debated at the Southern Thoracic Surgical Association Annual Meeting in November 2011 by Dr Shu Lin, who sided with the prisoner, and Dr Jay Pal, who sided with the parole board.

---

## Pro

Shu S. Lin, MD, PhD, and Lauren Rich, RN, BSN

The shortage of donor organs often seems insurmountable. As a transplant surgeon, I understand the importance of seizing every appropriate opportunity to help patients with end-stage organ failure. When I

learned that prisoners on death row have been denied their desire to donate their organs after execution, I asked myself, "Why not allow it?"

### Why Not Allow Death Row Inmates To Donate?

Each organ donor means at least one or more lives saved. Pursuing every opportunity for organ donation is not merely an attempt to "close the ever-widening gap between demand and supply of organs" in transplantation, as some have charged [2]. It is, quite simply, to help individuals

Presented at the Fifty-eighth Annual Meeting of the Southern Thoracic Surgical Association, San Antonio, TX, Nov 9–12, 2011.

Address correspondence to Dr Sade, Department of Surgery, Institute of Human Values in Health Care, Medical University of South Carolina, 25 Courtenay Dr, Ste 7018, MSC 295, Charleston, SC 29425-2950; e-mail: sader@muscd.edu.

suffering from end-stage organ disease. The center of attention, in my mind, should be the patient, and how we, as health care providers, can help them. There is no question that, when there is a therapy with known benefits to the patients we serve, it is reasonable that we should attempt to implement that therapy pending evaluation of the risks or the drawbacks of that therapy.

Organ donation is legally governed in the United States by two documents—the National Organ Transplantation Act (NOTA) of 1984, a federal law, and the Uniform Anatomical Gift Act (UAGA), a state law—neither explicitly prohibits organ donation by death row inmates. NOTA stipulates that organ donation cannot be made for “valuable considerations,” including any monetary or material benefit or, for prisoners, a shorter sentence—obviously not an issue for death row inmates. Under the UAGA, any adult can commit to being an organ donor simply by saying so in a document, such as a donor card or a symbol on a driver’s license. Therefore, the critical question here is what are the reasons *not* to permit donation by condemned prisoners?

### Why Prohibit Prisoner Donation?

Objections to allowing death row inmates to be organ donors can be categorized into those caused by *practical barriers* and those involving *ethical or moral concerns* [2]. Wide cultural differences require that this discussion be considered in the context of US law and culture, not necessarily those of other countries [3].

**Practical barriers. Small number of potential organ donors.** *Even if death row inmates are allowed to donate their organs, this practice “cannot yield anything more than a tiny number of organs for those in need”* [2]. Whether or not this statement is true, the point of using consenting death row inmates as organ donors is not to solve the problem of organ shortage but to help patients who are in dire need of transplantable organs. The number of patients directly helped is not relevant, given the hugely significant impact on the recipients and their families.

**Quality of donor.** *On the basis of the medical and social history of these individuals, many of these prisoners “would not be eligible to serve as donors due to age, ill health, obesity, or communicable disease”* [2]. Yet, so-called marginal donors have yielded perfectly usable organs for transplantation, and donor variables rarely have significant adverse effects on the outcome of transplant recipients. Although all might not be suitable donors, exclusion of all prisoners as donors would result in missed opportunities to transplant acceptable organs.

In addition, the idea that transmission of infectious diseases is a great risk if prisoners donate, while seemingly legitimate, is refuted by the fact that there would be more time for screening death row inmates than typical brain-dead donors in hospitals. Thus, the rate of disease transmission might actually be lower when death row inmates donate because of the possibility of more thorough screening processes.

**Difficulties from method of execution.** *Organ donation by condemned prisoners will be less successful than donation in a hospital setting because of the “legal and practical requirements of*

*the execution”* [2]. The most common method of execution in the United States is injection of a three-drug combination (sodium thiopental to induce unconsciousness, pancuronium bromide to cause muscle paralysis and respiratory arrest, and potassium chloride to achieve cardiac arrest), so donation by death row inmates will be more like donation after cardiac death (DCD) than typical brain-death donation. The speculation that a prisoner’s DCD organs would be qualitatively inferior is flawed, however, because DCD in hospitals is associated with more or less lengthy periods of hypoxemia before death is declared, up to 60 minutes after extubation, and the procurement process begins after an additional waiting period of up to 5 minutes. Thus, the potential for ischemic damage to various organs may actually be greater in hospital DCD than in the setting of execution, which has an ischemic time of only 10 to 15 minutes before organ recovery can begin.

Moreover, even if organs of executed prisoners were of reduced quality, the lung transplant literature indicates that donor factors generally do not play a significant role in the outcome of transplantation. Many organs considered not transplantable today could be safely used in chronically or critically ill recipients, and recent technologic advances, such as *ex vivo* lung perfusion, might allow even more options for transplanting marginal organs.

**Respecting the dead donor rule.** *The question, “Could organ removal be used as the mode of execution?”* [2], is a cynical polemic, not an argument. The dead donor rule requires that procuring organs not cause death; that rule has governed the transplant field for decades and is likely to continue to do so. Moreover, death and donation are consistently observed as two distinct processes, and in accordance with current guidelines, physicians must not be involved in the execution of the prisoner-donor [4].

**Ethical or moral concerns. Coercion is inevitable in donation by death row inmates.** *Coercion can be “subtle” and “even without an explicit reward like early parole in exchange for a promise of organ donation, prisoners will understand themselves to be making an implicit exchange for their generosity, and policymakers will take advantage of that unspoken expectation.”* Moreover, *“free and voluntary consent is compromised by the prison environment”* [5]. Although this argument may be relevant to ordinary inmates, it does not apply to condemned prisoners, such as Christian Longo, who willingly and voluntarily ask to donate after execution. Precedent for allowing donation by non-death row inmates already exists (although the arguments for and against this practice are just as heated) [6], so why not permit it in condemned prisoners, in whom coercion is less of an issue?

Although Christian Longo is not the first condemned prisoner to request organ donation after his execution, his case is the most publicized in recent memory. As far as we know, no one approached Longo to ask him to consider donating his organs after the execution; he voluntarily thought of this plan and wrote his editorial in the *New York Times* after its rejection. In at least 14 earlier cases, death row inmates or their lawyers sought opportunities to donate their organs but were denied. Clearly, death row inmates are requesting to donate their organs for transplantation,

indicating their willingness to consent to this process. It is hypocritical to argue that organ donation by death row inmates is morally wrong because the prisoners' autonomy is undermined by a subtle form of coercion [5], because denying the prisoners' requests to donate is an even greater compromise of their autonomy.

**Organ donation by death row inmates undermines moral justification of capital punishment.** *The two moral justifications of capital punishment are retribution and deterrence of future criminal acts, and organ donation by death row inmates undermines both justifications* [2]. These arguments are not strong enough, in my view, to prohibit death row inmates from willingly donating their organs for transplantation.

Retribution "may be made far more difficult to achieve as families and friends of victims watch as executed perpetrators are lauded in their final days by possible recipients and the media for their altruism in saving lives" [2]. It seems unfair, at initial glance, that a person who committed a heinous crime would become a hero of some sort at the end. Consider the implications of this position: if the goal is to uphold retribution in capital punishment, then perhaps society should not allow "condemned prisoners to apologize or make amends for their crimes, to perform the simplest unselfish acts of kindness, to seek religion, or experience any form of spiritual growth or awakening" [7]. Viewed in this way, retribution seems to be a weak justification for capital punishment. The same ethicists who claim that organ donation after execution will be seen as a heroic act contradict their other assertion that subtle coercion forces donation on the prisoners. Is such donation a willing, altruistic, laudable deed, or is it a coerced action? The logical inconsistency of the moral opposition to donation by death row inmates is evident.

The deterrence function of capital punishment is undermined when "social good is seen as issuing from the practice [of condemned prisoners donating organs]" [2]. It seems highly unlikely that the perpetrator of a violent crime would contemplate, in advance of his evil deed, the potential benefit to society by the availability of organ donation. Furthermore, if deterrence is an important goal of capital punishment, then "execution preceded by extended torture" might be a better deterrent than "execution preceded by imprisonment," so advocates of deterrence might find torture to be morally superior to mere imprisonment [8].

### Opinion Polls

In our liberal democracy, public acceptance of a policy or a practice is important. We were able to find three extensive

opinion polls related to this topic, and all provided overwhelming support for the idea that condemned prisoners should be allowed to donate their organs for transplantation [9, 10]. A month after Longo's editorial, MSNBC news organization found that 77.3% of 86,736 subjects responded "yes" to the question, "Should death row inmates be allowed to donate their organs?" [9]. Another opinion poll conducted in conjunction with Longo's story asked, "Should a man who killed his wife and two children be allowed to donate his organs?"; nearly 90% of 588 voters responded "yes" [10]. Clearly, the general public seems to see death row inmates like Longo as potentially acceptable donors for those who are in dire need of transplantable organs.

To assess the views of potential organ transplant recipients regarding acceptability of organs from death row inmates, we surveyed the 16 patients on the Duke Lung Transplant Program's active waiting list. We posed the hypothetical question, "If we knew a donor was disease-free and their lungs were in good condition, would you be willing to accept lungs from a death-row inmate?" Twelve (75%) responded "yes" and 4 responded "no." One individual who replied "yes" commented that this is an acceptable practice "even if just one person was helped." One negative responder stated that the response would have been "yes" in case of greater recipient instability. Thus, there is agreement, even among those who are actually on the "receiving" end of the debate, that condemned prisoners are indeed acceptable donors for organ transplantation.

### Summary

Given appropriate screening, no medical reason renders death row inmates unsuitable as organ donors. Individuals with past criminal records and those with unknown medical and social background are currently not excluded from organ donation, and many donors who were once considered marginal are now known to contribute safely to helping patients who are suffering from end-stage organ failure. Thus, there is no logical reason why condemned prisoners, after execution, cannot donate usable organs. Death row inmates willingly request it, the general public supports it, and potential recipients accept it. Should poorly grounded moral objections of a few people prevent the precious opportunities for those who might benefit from receiving those organs? Ultimately, opinions for or against donation after execution reflect the values of our society—are we more interested in retribution and deterrence, or in actually helping those who have no other options?

---

## Con

Jay D. Pal, MD, PhD

**O**rgan donation is a life-saving treatment for patients who suffer from advanced organ failure. Since the first kidney transplant in 1954, thousands of patients have benefited from the "Gift of Life" that is organ donation.

With the exception of living related kidney (and to a much smaller extent, liver) donors, most transplanted organs are obtained from cadaveric donors. As such, organ transplantation remains limited by the number of

available donors. Despite the incidence of traumatic death in the United States, only 6,000 to 8,000 deceased donors are available annually, compared with 112,718 patients currently awaiting transplantation [11, 12]. Approximately 18 individuals will die each day while awaiting a suitable organ donor [12]. Therefore, many novel attempts have been made to increase the potential donor pool. These have included donor registries, first-person consent, surrogate consent, and the use of prisoners as a source of organs.

There has been renewed interest in the use of condemned prisoners as organ donors, as recently highlighted by a *New York Times* editorial by Christian Longo [1]. Mister Longo, convicted of murder, awaits the death penalty in Oregon. He states his desire to donate his organs after his execution, and claims that half of the death row inmates in Oregon share his desire. However, the prison board has denied his petition in the "best interests of the public and condemned inmates."

Transplant physicians are regularly confronted by the effects of an inadequate donor population on patients awaiting transplantation. However, deeper consideration of the use of prisoners as organ donors raises several concerns. These reservations can be grouped into three categories: legal, moral or ethical, and logistical. Thoughtful insight into these concerns will provide ample evidence that death row inmates are not suitable organ donors.

### Legal Issues

Two basic tenets of organ transplantation as stated by the World Health Organization and the World Medical Association are that vital organs should only be removed from dead patients, and that living patients should not be killed for or by organ procurement. This dead-donor rule has been fundamental in the identification of potential organ donors since the 1950s. Accordingly, the accepted definition of death can be by (1) traditional cardiopulmonary criteria, which is the cessation of circulatory and respiratory functions, or (2) brain-death criteria, which is the irreversible cessation of brain function including brainstem activity (Uniform Declaration of Death Act of 1981). Although there has been recent discussion regarding the modification of the dead-donor rule in the case of patients with irrecoverable brain injury with remaining brainstem activity, the prevailing norm is that potential donors meet the currently accepted definitions of death [13-16].

The concept of brain death provided the legal justification for organ procurement [17]. More recently, the declaration of brain death has been clarified and standardized [18]. The primary obstacle for organ donation from executed prisoners is that they do not die (brain-death) on life support, as is typical for most organ donors. The most common method of execution in the United States is a three-drug protocol to cause sedation, then respiratory and circulatory arrest. After a waiting period of 10 to 15 minutes, the prisoner is examined for evidence of cardiac activity, and in its absence, declared dead. Any modification of the method of execution to decrease this

waiting period may result in death occurring as a result of organ procurement, which places the surgeon in the role of executioner.

The second legal question to arise in the use of organs from death row inmates is the ability to consent. The concept of informed consent requires the ability to understand the procedure, as well as the autonomy to make a decision without coercion. Although there are some differences among states, all prisoners lose some component of citizenship rights at the time of conviction. Death row inmates, in particular, are expressly stripped of the right to make personal decisions. In most states, the prisoner becomes a ward of the state, or a property of the state, and therefore the state holds the legal authority to consent for the inmate. In every case regarding prisoner donation of organs, state prison boards have upheld this authority and denied inmate petitions. Furthermore, numerous legal reviews have provided arguments against the legality of organ donation from executed prisoners, citing lack of defined first-person consent, implied coercion, and an inherent conflict of interest [19-21].

### Moral or Ethical Issues

A far more problematic issue in the use of organs from death row inmates is the ethical dilemma of obtaining organs from patients who are being executed. Prisoners are subject to physically and psychologically stressful conditions that undoubtedly affect the decisions they make. Mister Longo states that he "spend(s) 22 hours a day locked in a 6 foot by 8 foot box on Oregon's death row" [3]. The Uniform Anatomical Gift Act requires that all organ donation be provided without coercion. However, prisoners are particularly vulnerable to both direct and implied coercion by virtue of their incarceration. This coercion may be subtle, without any explicit promise of reward for donation, but prisoners may "understand themselves to be making an implicit exchange for their generosity" [13]. The National Institutes of Health acknowledges this coercion in its rules regarding prisoner consent: "Prisoners may not be free to make a truly voluntary and uncoerced decision. . .the regulations require additional safeguards" [22].

Organ procurement in the setting of such coercion is often cited by bioethicists as a reason to avoid the use of executed prisoners as organ donors [2, 23, 24]. In addition, the American Society of Transplant Surgeons states that the use of organs from executed prisoners is unacceptable and that procurement under these circumstances violates the basic principles of transplantation, such as the need for free and willing donation of organs.

The World Medical Association has issued a similar statement, specifically with regards to organ procurement from executed prisoners in China [25]. More than 5,000 prisoners are executed in China annually, and organs are harvested for transplantation from suitable prisoners. Prisoners who are destined to become organ donors are executed by a temporal gunshot wound. The prisoners are declared dead secondary to execution, rather than the usual definitions of brain-death or circulatory-death, and transported to a hospital for organ

procurement. This process has been described as “death-row inmates received unfinished execution in the surgery theater at the hospital, and their execution is continued after the firing squad and finished by the transplantation surgeons” [3]. The process of execution without consent for organ procurement, as well as a lack of confirmation of brain-death, has led to numerous calls for the end of organ procurement from executed prisoners [23, 26–29]. Although the process of execution in China is not directly comparable to execution in the United States, the underlying principles of autonomy and morality are applicable.

Given the numerous outstanding ethical issues regarding organ procurement from executed prisoners, the Organ Procurement and Transplant Network/United Network of Organ Sharing Ethics Committee generated a white paper that concluded: “The UNOS Ethics Committee has raised a small number of the many issues regarding organ donation from condemned prisoners. The Committee opposes any strategy or proposed statute regarding organ donation from condemned prisoners until all of the potential ethical concerns (coercion, method of execution, issues of informed consent) have been satisfactorily addressed.”

### Logistical Issues

A third argument against the feasibility of transplanting organs from prisoners is the logistical and practical difficulties in procuring and preserving organs after execution. The most common method of execution in the United States is lethal injection. Prisoners are typically sedated, paralyzed to induce respiratory arrest, then injected with potassium to induce cardiac arrest. After a waiting period of 10 to 15 minutes, the prisoner is examined for evidence of cardiac activity, and in its absence, declared dead. Because executions are performed in maximum security prisons and not in medical facilities, the prisoner would be dead for an extended period before the donor is transported to a hospital and organ procurement can be performed. Organ donation from brain-dead donors occurs with preservation of organs at the time of circulatory arrest. This allows preservation of graft function by immediately halting cellular respiration by instillation of cold preservation solution as systemic blood flow is interrupted. During DCD, circulatory death occurs in an environment (typically an operating room) where the procurement procedure can commence rapidly and organs can be placed in preservation solution within minutes. However, fewer organs are recoverable because of the delay in preservation. Highly metabolically active organs such as the heart and lungs are frequently not recoverable with DCD. In the setting of death in a prison environment, the extended delay to procurement would yield very few transplantable organs.

A possible solution would be to move the execution to a facility where organs can be recovered more rapidly, similar to DCD procedures. But that would require moving an inmate to a hospital before execution. The process of moving an inmate to an unsecured location would be

difficult, given the uncertainty of the appeals process, protests, demonstrations, security requirements, and potential for escape. Also, many hospitals will likely be resistant to accepting prisoners for execution. Despite the potential financial benefit from providing a location for organ procurement, the public relations impact of becoming a center of execution would be detrimental.

Similarly, to minimize ischemic time from execution to organ procurement, physicians and surgeons would need to be intimately involved in the execution process itself. Although most physicians would not consider participating in the execution itself, the procurement procedure in conventional brain-dead donors is deliberately separate from the declaration of death. However, DCD procedures create some ambiguity that many physicians find disturbing. Consider the case of Dr Hootan Roozrok, the transplant surgeon who was accused of hastening the death of a potential organ donor to expedite organ procurement. Although he was ultimately acquitted, this case highlights the public misunderstanding of organ procurement and the heightened emotions associated with this process. The processes of death and organ donation must be kept separate, but organ procurement from an executed prisoner makes this distinction difficult because there are conflicting priorities. The prison system needs to ensure a painless and efficient death, which requires stopping the heart and waiting a predetermined time to ensure death has occurred, whereas the transplant surgeon needs a rapid cessation of circulatory function with the ability to remove organs and place them in preservation solution immediately. Any efforts to decrease the waiting period place the transplant physician in a conflicted position of potentially hastening the process of execution to increase the organ yield.

### Conclusions

Although organ donation after prisoner execution will continue to be debated, it is helpful to consider how much benefit may actually be realized. In the first 9 months of 2011, 10,558 individuals donated organs in the United States. In contrast, 39 inmates were executed. The average age of executed prisoners is older than 50 years, and many suffer from chronic illnesses such as diabetes and hypertension. By conventional criteria such as age, medical conditions, and communicable disease, half of these prisoners would not be eligible donors [19]. Therefore, the net increase in donors is less than one fifth of 1%. And given the DCD nature of these donations (with prolonged ischemic times), only kidneys are likely to be recoverable.

Given the contentious nature of this topic, we must evaluate the legal, moral, and logistical impediments to organ procurement from prisoners for the net gain of only 20 donors per year. Less controversial methods to increase the number of donor organs can be obtained by increasing public awareness of organ donation, creating donor registries, and improving organ yield from the eligible donors.

## Concluding Remarks

Robert M. Sade, MD

Lin and Rich make a single but telling point in favor of allowing prisoners on death row to be organ donors: the primary focus of physicians should be on helping patients, in this case, patients with failing organs who need a replacement organ. They classify objections to allowing condemned prisoners to donate into two categories: practical obstacles and ethical or moral issues. They respond to several concerns in each category, indicating why they believe none is decisive. They also cite opinion polls asking whether condemned prisoners should be allowed to donate and report the results of a survey of waiting lung transplant recipients in their institution. All survey results strongly favor allowing donation.

Pal finds problems with allowing donation in three areas: legal, moral or ethical, and logistical. He discusses the 10- to 15-minute delay between lethal injection and pronouncement of death, which increases warm ischemic time, threatening the quality of recovered organs. He says that the situation of prisoners makes coercion unavoidable, but this claim rests largely on how one frames the meaning of coercion [30]. Pal cites the Chinese practice of recovering organs for transplantation immediately after execution by firing squad, which, as he points out, is not comparable to potential organ recovery after execution in the United States. He also believes that the small number of potential donors under these circumstances, perhaps 20 a year, is not worth overcoming the many objections to the practice and could result in adverse publicity for organ donation.

We have not been told the reasons for parole boards denying condemned prisoners the option of voluntary organ donation, apparently the conclusion in all the cases of which we are aware. Legally, there is little question that prison authorities have the power to decide whether to allow organ donation. From an ethical viewpoint, however, the question is, *should* donation be denied a condemned prisoner who makes a voluntary request? For physicians, the idea of allowing donation draws support from the highest of physician's obligations, our paramount responsibility for the welfare of our patients. As a matter of law, the decision of whether organ donation by prisoners on death row should be permitted rests with prison authorities. As a matter of ethics, however, the question has not been settled, as this debate demonstrates. For physicians, our primary ethical responsibility—doing what is best for our patients, including the few whose lives would be saved by organs from executed prisoners—seems to place the burden of proof on those who would deny condemned prisoners the option of donation.

---

Dr Sade's role in this publication was supported by the South Carolina Clinical & Translational Research Institute, Medical University of South Carolina's Clinical and Translational Science Award Number UL1RR029882. The contents are solely the responsibility of the authors and do not necessarily represent the official views of the National Center for Research Resources or the National Institutes of Health.

---

## References

1. Longo C. Giving life after death row. *New York Times* March 5, 2011:WK12.
2. Caplan A. The use of prisoners as sources of organs—an ethically dubious practice. *Am J Bioeth* 2011;11:1-5.
3. Tsai DF-C, Tsai M-K, Ko W-J. Organs by firing squad: The medical and moral implausibility of death penalty organ procurement. *Am J Bioeth* 2011;11:11-3.
4. Council on Ethical and Judicial Affairs. Opinion 2.06, Capital Punishment. In: Code of medical ethics of the American Medical Association, 2010-2011. Chicago, IL: American Medical Association, 2010:23-32.
5. Potter NN. What it means to treat people as ends-in-themselves. *Am J Bioeth* 2011;11:6-7.
6. Goldberg AM, Frader J. Prisoners as living organ donors: the case of the Scott sisters. *Am J Bioeth* 2011;11:15-6.
7. Johnson LSM. The ethically dubious practice of thwarting the redemption of the condemned. *Am J Bioeth* 2011;11:9-10.
8. Murphy P. Would donation undercut the morality of execution? *Am J Bioeth* 2011;11:13-4.
9. [http://health.newsvine.com/\\_question/2011/04/20/6504300-should-death-row-inmates-be-allowed-to-donate-their-organs](http://health.newsvine.com/_question/2011/04/20/6504300-should-death-row-inmates-be-allowed-to-donate-their-organs).
10. Should man who killed wife and two children be allowed to donate his organs? Available at: <http://www.sodahead.com/united-states/should-man-who-killed-wife-and-two-children-be-allowed-to-donate-his-organs/question-1707899/>. Accessed March 13, 2012.
11. Transplant Trends. Available at: <http://www.unos.org>. Accessed March 13, 2012.
12. Health Resources and Services Administration. Organ Procurement and Transplantation Network. Available at: <http://optn.transplant.hrsa.gov>. Accessed March 13, 2012.
13. Youngner SJ, Arnold RM. Ethical, psychosocial, and public policy implications of procuring organs from non-heart-beating cadaver donors. *JAMA* 1993;269:2769-74.
14. Miller FG, Truog RD. Rethinking the ethics of vital organ donations. *Hastings Cent Rep* 2008;38:38-46.
15. Truog RD. Consent for organ donation—balancing conflicting ethical obligations. *N Engl J Med* 2008;358:1209-11.
16. Truog RD, Miller FG. The dead donor rule and organ transplantation. *N Engl J Med* 2008;359:674-5.
17. [No authors listed]. A definition of irreversible coma. Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death. *JAMA* 1968;205:337-40.
18. Quality Standards Subcommittee. Practice parameters: determining brain death in adults. St. Paul, MN: American Academy of Neurology, 1994. Available at: [http://www.aan.com/professionals/practice/guidelines/pda/Brain\\_death\\_adults.pdf](http://www.aan.com/professionals/practice/guidelines/pda/Brain_death_adults.pdf). Accessed March 13, 2012.
19. Hinkle W. Giving until it hurts: prisoners are not the answer to the national organ shortage. *Indiana Law Review* 2002;35:593-619.
20. Anderson MF. The prisoner as an organ donor. *Syracuse Law Rev* 2000;50:951.

21. Robertson JA. The dead donor rule. *Hastings Cent Rep* 1999;29:6-14.
22. Research involving vulnerable populations, O.o.E.R. US Department of Health and Human Services, Editor.
23. Hillman H. Harvesting organs from recently executed prisoners. Practice must be stopped. *BMJ* 2001;323:1254.
24. Cameron JS, Hoffenberg R. The ethics of organ transplantation reconsidered: paid organ donation and the use of executed prisoners as donors. *Kidney Int* 1999;55:724-32.
25. World Medical Association Council Resolution on Organ Donation in China. Available at: [http://www.wma.net/en/30publications/10policies/30council/cr\\_5/](http://www.wma.net/en/30publications/10policies/30council/cr_5/). Accessed March 13, 2012.
26. Caplan AL, Danovitch G, Shapiro M, Lavee J, Epstein M. Time for a boycott of Chinese science and medicine pertaining to organ transplantation. *Lancet* 2011;378:1218.
27. Danovitch GM, Shapiro ME, Lavee J. The use of executed prisoners as a source of organ transplants in China must stop. *Am J Transplant* 2011;11:426-8.
28. Huang J, Millis JM, Mao Y, Millis MA, Sang X, Zhong S. A pilot programme of organ donation after cardiac death in China. *Lancet* 2012;379:862-5.
29. Trey T, Halpern A, Singh MA. Organ transplantation and regulation in China. *JAMA* 2011;306:1863-4.
30. Wertheimer A. *Coercion*. Princeton, NJ: Princeton University Press, 1987:3-14.