#### Abstract

The United States continues to enthusiastically practice capital punishment. Since 1976, nearly 800 people have been executed, including 35 mentally retarded individuals and 19 juvenile offenders. As of April 2002, more than 3,700 people awaited execution and, compared to the general population, were disproportionately poor, members of minorities, and mentally disabled. As the number of executions increased over the past decade, the "machinery of death" has relied more and more on lethal injection to make executions more "clinical" and thus acceptable to the public. At the dawn of World War II, Nazi physicians developed a "euthanasia program" that "medicalized" killing—creating an illusion of healing to justify killing—to eliminate Germany's disadvantaged citizens. In the United States, as in Nazi Germany, state-sponsored killing has become dependent on physician complicity.

Les États-Unis appliquent encore la peine de mort avec enthousiasme. Depuis 1976, près de 800 personnes ont été exécutées, dont 35 présentant un retard mental et 19 mineurs. En avril 2002, plus de 3 700 condamnés attendaient d'être exécutés ; parmi eux, la proportion de pauvres, de membres appartenant à des minorités ou mentalement retardés est largement supérieure à celle enregistrée dans la population générale. Le nombre d'exécutions ayant augmenté au cours de la dernière décennie, la « machine de mort » recourt de plus en plus aux injections mortelles qui donnent aux exécutions un cachet plus « clinique », donc plus acceptable pour le public. À l'aube de la seconde guerre mondiale, des médecins nazis avaient développé un « programme d'euthanasie » qui « médicalisait » le meurtre, justifiant notamment les mises à mort par une illusion de guérison, en vue d'éliminer d'Allemagne les citoyens défavorisés. Aux États-Unis comme en Allemagne nazie, l'homicide organisé par l'État s'appuie aujourd'hui sur une complicité médicale.

Los Estados Unidos continúan implementando enérgicamente la pena de muerte. Desde 1976 alrededor de 800 personas han sido ejecutadas; de estas 35 fueron discapacitados mentales y 19 criminales juveniles. Hasta abril del 2002 más de 3.700 personas estaban esperando a ser ejecutadas. Estas personas, en comparación con la población general, son desproporcionadamente pobres, miembros de minorías, y discapacitados mentales. A medida que la cantidad de ejecuciones aumentó durante la última década, la "maquina de la muerte" comenzó a utilizar más y más sobre las inyecciones mortales para que las ejecuciones se volviesen más "clínicas" y por lo tanto más aceptadas por el público. En el comienzo de la Segunda Guerra Mundial, los médicos Nazi desarrollaron un "programa de eutanasia" que "medicalizaba" los asesinatos (creando la ilusión de curación para justificar los asesinatos), eliminado así a ciudadanos desfavorecidos de Alemania. En los Estados Unidos, como sucedió en la Alemania Nazi, los asesinatos patrocinados por el gobierno dependen de la complicidad de los médicos.

# Lethal Injection and the Medicalization of Capital Punishment in the United States

#### Jonathan Groner

"An IV Administration Set . . . shall be inserted into the outlet of the bag of normal saline. . . . The tubing shall be cleared of air and made ready for use. . . . Angiocath/cathlon devices shall be initiated through standard procedure for such devices." <sup>1</sup>

hat quotation is not from a manual of medical procedures but from an Arkansas Department of Correction administrative directive entitled "Procedure for Execution." On 8 January 1997, this protocol was followed precisely to execute three convicted killers. Earl Denton was led to the death chamber at 6:53 P.M., and bilateral upper extremity intravenous lines were established by the IV (intravenous) team in seven minutes. On a signal from the warden, Sodium Pentothal, 2.0 gm IV (Abbott Laboratories, Abbott Park, IL, USA); followed by Pavulon, 100 mg IV (Organon Inc., West Orange, NJ, USA); and last, potassium chloride, 150 mEq IV. were infused, with a 10–15 ml flush of normal saline between each drug.2 Cardiopulmonary arrest occurred, and Mr. Denton was pronounced dead at 7:09 P.M. The next man, Paul Ruiz, underwent the identical procedure less than an hour later. Then Kirt Wainwright, the last man on the schedule, was positioned on the table and the IV team repeated its work. He waited briefly while the United States Supreme Court considered an appeal. It was rejected, and the lethal infusion began at 9:38 P.M. Wainwright was

Jonathan I. Groner, MD, is Director of Trauma at Children's Hospital, Columbus, Ohio, USA. Dr. Groner is also Assistant Professor of Clinical Surgery at the College of Medicine and Public Health at the Ohio State University, in Columbus, Ohio. Please address correspondence to the author at gronerj@chi.osu.edu.

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pronounced dead 12 minutes later.3

Although a triple execution is unusual (occurring only twice since 1976), the technique—intravenous infusion of large doses of drugs that could be found in virtually any operating room—is not. In fact, lethal injection is the standard of care for executions in the United States and is available in nearly all of the 38 states that practice judicial killing. Between 1982 (the year of the first lethal injection) and 1999 (the current "peak" execution year), the annual number of executions in the United States increased almost fiftyfold. Lethal injection has been used more than 600 times since capital punishment was reinstated in the United States in 1976. In 1999, 95% and in 2000, 94% of capital sentences were carried out by this method. In 2001, its use increased to 100%.4

Similar to outpatient cholecystectomy and "drivethrough" deliveries, lethal injection was inspired not by "patient" concerns but by cost-containment issues. During the execution moratorium of the early 1970s, Oklahoma's unused electric chair deteriorated to the extent that \$60,000 in repairs were required to make it functional again. Unwilling to spend this sum on condemned prisoners, an Oklahoma state senator consulted Stanley Deutsch, MD, a practicing anesthesiologist and professor of anesthesiology at the University of Oklahoma, for medications that might replace the electric chair's function. Deutsch suggested that a modified anesthetic induction, using a barbiturate followed by a muscle relaxant (such as succinylcholine or curare), would be an ideal (and inexpensive) way to bring about a speedy and humane demise. He assured the senator, based on his own experience as a patient, that this was not only a rapid and pleasant way to be rendered unconscious for an operation, but also an "extremely humane" execution method.5

Deutch's recommendations were formalized first into Oklahoma law in 1977, and a short time later into Texas law. Modern lethal injection was first used in Texas in 1982. The subject, who had not volunteered, was a 40-year-old African-American male. Two physicians watched as the anesthetics were injected into the subject's veins, causing death within

minutes. The procedure was deemed a success. An observer commented: "With the medical paraphernalia—intravenous tubes, a cot on wheels and a curtain for privacy—the well-lighted cubicle might have been a hospital room."

#### **Execution as a Routine Medical Procedure**

Since 1982, lethal injection has become popular in the United States not only because it is inexpensive but also because it is "humane." Compared to electrocution or cyanide asphyxiation, lethal injection is considered "more dignified." One experienced warden described the effects of a lethal injection as looking similar to "closing your eyes and going to sleep." A district attorney claimed that lethal injection "brings about unconsciousness in 15 seconds and . . . brings death approximately 15 seconds later," while a researcher in anesthesiology and critical care at Johns Hopkins University School of Medicine stated that, "It is a method where you can literally put the prisoners to sleep in 5 to 10 seconds." A Texas prison chaplain who has witnessed dozens of these executions observed that, "It's as humane as any form of death you can find."

Treating the inmate as a patient further strengthens the humane façade of lethal injection. When the execution date approaches, a doctor performs a "pre-execution physical."12 The inmate is often transferred to a "death watch" cell, where guards chart the inmate's activities and a nurse may offer analgesics or antacids—prescribed by the prison doctor—to relieve any discomfort. Some prisons have a "death house"—a separate building that contains a holding cell, visiting room, and execution chamber. This is the death-row hospice that offers attentive staff, allows frequent phone calls and visitors, and provides a readily available chaplain. Sister Helen Prejean, a well-known opponent of capital punishment, said that death houses are reminiscent of a hospital: "Floors are polished, clean sheets hang over the edge of the gurney. Alcohol is used to disinfect the prisoner's arm before the needle for lethal injection is inserted."13 In Missouri, executions take place in the prison's hospital. In an interview, a prison doctor reported that he gives "one to two milligrams of Versed intravenously . . . so the patient has an anxiety-free state of mind."14

Doctors are often essential participants in the execution process. Three physicians administered the first lethal injection in Illinois; the state had also enacted legislation (which was later repealed) that required active physician involvement and guaranteed anonymity of physician-executioners. 15,16 In Nevada, a physician examines each condemned prisoner during the week before the execution to determine the site of venous access and to prescribe the doses of the lethal drugs.<sup>17</sup> In one instance, a surgeon was needed to insert the intravenous catheter into a condemned man after the execution team's attempts had failed. 18 In another recent case, when a nurse was unable to find a usable vein, a physician performed a "central venous catheterization" (a highly skilled procedure in which an intravenous line is placed into one of the great veins leading to the heart) in order to carry out the execution. 19

Physicians, intravenous lines, and anesthetic drugs have made lethal injection a commonplace medical procedure. Executions are now "so routine they barely make the papers or draw protesters to the prisons," and killings often occur during daylight, instead of the traditional midnight hour.<sup>20,21</sup> Cost containment remains important too. According to the Arkansas governor's office, that state's triple execution in January 1997 was "substantially less costly and more efficient" than the traditional one-a-day method.<sup>22</sup> And, not to be outdone by outpatient "surgery centers," the U.S. Department of Justice constructed a 2,123-square-foot, state-of-the-art, lethal-injection facility in Terre Haute, Indiana, which features "a motorized deathbed on which the condemned prisoner can be strapped down and killed . . . at the touch of a button."23 This facility was first used for Timothy McVeigh's "quick and clinical exit" on 11 June 2001.24

Although the purpose of this routine "medical" procedure is to kill the "patient," lethal injection—because of its medical veneer—is often portrayed as part of the healing process. Its alleged therapeutic effect has been repeatedly promoted in courtrooms and in the press. "We really want to help with the healing in any way we can," commented a

Texas Board of Criminal Justice member about a law allowing families of murder victims to view executions. The wounds have never healed in 17 years, a murder victim's wife told reporters before an execution in 1995. Let this [be] . . . the beginning of a healing for all, she said.

"We're praying that his healing can begin now," commented relatives after a 25-year-old watched the lethal injection of the man who had murdered his mother a decade earlier. A 1996 New York Times headline read: "Families hope . . . killer's execution ends their years of pain." And after 232 survivors and victims' relatives in Oklahoma City watched the broadcast of Timothy McVeigh's execution, his lawyer commented, "We have made killing part of the healing process." <sup>29</sup>

### A Nazi Technique for Mercy

In *The Nazi Doctors*, Robert J. Lifton referred to "the imagery of killing in the name of healing" as the "medicalization" of killing. Lifton demonstrated that medicalized killing in the form of lethal injection had been a prominent feature of Nazi medicine.<sup>30</sup> SS physicians (including the notorious Dr. Mengele) frequently used intravenous and intracardiac injections of phenol to kill ailing concentration camp prisoners. An Auschwitz prisoner-doctor noted: "It was very much like a medical ceremony. . . . They were so careful to keep the full precision of a medical process—but with the aim of killing."<sup>31</sup>

But even before the death camps, lethal injection and other medicalized killing techniques were practiced on Germany's own citizens. In 1939, Hitler established a euthanasia program, code name T-4, ostensibly to perform mercy killings of terminally ill patients. In fact, T-4 was managed care to the extreme: Under the guise of cost saving, it was a "nationwide, centralized, and peer-reviewed program to murder both adult and pediatric patients clinically classified as futile cases." Primary-care physicians registered patients who had disabling, but nonfatal, diseases, including schizophrenia, epilepsy, encephalitis, "every type of feeblemindedness" and those considered "criminally insane." T-4 also targeted any institutionalized patients

"who are not German citizens, or are not of German or kindred blood, race or nationality."<sup>34</sup> An assessing committee reviewed each case; then a senior physician, "usually a professor and head of a medical department at one of the major universities," either approved or, on extremely rare occasions, rejected the committee's decision.<sup>35</sup>

An entirely separate organization devoted itself solely to killing disabled children. In that program, three physicians based their decisions on responses to a questionnaire about the child without ever actually conducting a physical exam or reading the medical record. Initially, only infants and toddlers were evaluated. Eventually, that population grew to include juvenile delinquents and teenagers with such maladies as "bedwetting, pimples, a swarthy complexion, or even annoying the nurses." An estimated 6,000 children perished as a result of this program's efforts.

Both of these euthanasia programs closely simulated medical practice, and humane treatment of the "patients" was a priority. Patients went to the T-4 centers with complete medical records, presumably for evaluation to determine a further course of treatment. In reality, all were killed. Nevertheless, a physician examined the new arrivals and recorded their vital signs. The nursing staff made certain that their beds had fresh linens and blankets and offered sedatives or aspirin to ease any discomfort. The staff seldom referred directly to the ultimate outcome as killing but referred to it as "final medical assistance." A doctor always supervised this "therapy"—whether it was lethal injection, poisoning, or gassing with carbon monoxide. In the words of T-4's chief administrator: "The syringe belongs in the hand of a physician." 38

The majority of people who ran these killing centers were not sadistic murderers. They were "doctors and bureaucrats, efficient men, attempting by . . . strict policy and procedure to alleviate what they perceived to be the burdens imposed upon society by chronic illness and disability." Two German professors articulated that mission in a popular book of the time entitled *The Permission To Destroy Life Unworthy of Life*. This treatise argued that killing those "unworthy of life" was consistent with med-

ical ethics and that "less valuable members of society have to be abandoned and pushed out." These unfortunate individuals were called "human ballast" and "empty shells of human beings." Keeping them alive, the authors wrote, was a misappropriation of valuable resources. Killing them was "an allowable, useful act" that would preserve the health of society.<sup>40</sup> The ethical attitude toward the mentally ill in Nazi Germany was "suspension of the traditional morality of the sanctity of human life, but to be treated without cruelty and unnecessary suffering."<sup>41</sup>

#### U.S. Death Row: A Warehouse for "Human Ballast"

"Life unworthy of life" is a fitting image for the death rows in the United States, where almost 4,000 people are currently fed, housed, and clothed for only one purpose: to be killed.<sup>42</sup> Since 1976, when a Supreme Court ruling reinstated capital punishment in the United States, nearly 800 inmates have been executed. In many states, a pardon board (not unlike the T-4 assessing committee), made up of citizens independently scrutinizes each prisoner's case and either approves or disapproves each death sentence with the predictable result: death recommended. One death-row resident observed that, "All death rows share a central goal: Human storage in an austere world in which the condemned prisoners are treated as bodies kept alive to be killed."<sup>43</sup>

T-4 ostensibly served a public health function, whereas death row serves criminal justice. Yet death row is also filled with "human ballast"—the poor, the poorly represented (and possibly innocent), minorities (African Americans make up 43% of death row but only 13% of the general population), and the mentally disabled. More than 10% of death-row inmates suffer from mental illness, and at least 10% are mentally retarded.<sup>44</sup> A comprehensive neuropsychiatric study of 15 death-row inmates revealed, however, that six were chronically psychotic, three were intermittently psychotic, and two were bipolar.<sup>45</sup> Since 1976, 35 mentally retarded people have been executed.<sup>46</sup> The number of psychotic inmates executed is unknown. Even had they not committed their crimes, many inmates currently on U.S. death rows would have undoubtedly caught the eye of

the T-4 assessing committee.

The population of "children's death row" (so-called because it comprises people sentenced to death for acts committed before they turned 18) continues to grow each year as well. Currently, 83 people have been sentenced to death for crimes they committed as juveniles, and 19 such offenders have been executed since 1976.47 Despite a nearly global consensus that people under the age of 18 who commit crimes should not be executed, only 16 of the 38 deathpenalty states have 18 as a minimum age to be sentenced to death.<sup>48</sup> Five states have an age minimum of 17. In the remaining states, the age limit is set at 16, either by statute or court ruling. Former California governor Pete Wilson once proposed that the minimum age to receive the death penalty should be lowered to 14, and a Texas legislator, in the aftermath of a school shooting, recommended the minimum age should be 11.49 The U.S. Supreme Court has ruled that the execution of people for crimes committed at age 16 is not "cruel and unusual."50

Furthermore, juvenile murderers also have a high incidence of mental impairment. A neuropsychiatric evaluation of 14 inmates sentenced to death as juveniles revealed neurologic impairment in 9 (64%) of them, and major psychotic disorders in 7 (50%). Only 2 subjects had I.Q. scores greater than 90, and all 14 had some history that suggested traumatic brain injury (severe childhood injuries were documented in 8).<sup>51</sup> For example, Chris Thomas, who was 17 when he committed a capital offence, suffered from depression and substance abuse in his adolescence. And Glenn McGinnis, also 17 when he committed his crime, was horribly abused by his mother and stepfather. These typify the kinds of mental illness found among the juvenile death-row population.<sup>52</sup> Both Thomas and McGinnis were executed in 2000.

# The "Final Solution" for a Growing Death Row

Despite the acceleration in the number of executions over the past 20 years, the death-row population in the United States has increased by almost 900%, from 420 in 1976 to 3,701 in 2002. Ten executions a month would be

needed to contain the explosive growth of the death-row population, and even more would be needed to actually reduce the population. Would the American public accept three or more executions every week? Lethal injection, which treats killing as a medical procedure, would be essential to reach that level of efficiency. For example, once the state of Georgia replaced the electric chair with lethal injection in October 2001, five inmates were executed within four months, a rate previously unheard of. In each case, in accordance with Georgia's execution protocol, physicians were present in the death chamber.<sup>53</sup>

In *The Nazi Doctors*, Lifton argued that "the destruction of the boundary between healing and killing" was the cornerstone of the T-4 euthanasia program and the holocaust that followed.<sup>54</sup> Medicalization allowed Nazi physicians—and ordinary citizens—to endorse the necessity of killing. When asked to explain mass extermination, a Nazi doctor responded, "out of respect for human life, I would remove a gangrenous appendix from a diseased body. The Jew is the gangrenous appendix in the body of mankind."<sup>55</sup> Similarly, a court in California once described a convicted murderer as "a cancer on society that must be surgically cut away . . . so the rest of the body can live and survive a horrible disease."<sup>56</sup>

The analogy made between death camps and death row may seem far-fetched, but those writing about Nazi medicine have observed that "extreme transgressions often shed light on more subtle moral dilemmas."57 For example, at the Nuremberg War Crimes Tribunal, the physician-director of the T-4 program defended, with "the deepest conviction," the killing of handicapped individuals, arguing that "it was never meant to be murder" and that "death can mean deliverance."58 Such rationalizations are also used to justify capital punishment, regardless of the execution method. But lethal injection, because of its medical appearance, has made this type of reasoning more compelling. Physicians who participate in lethal injection could argue that the procedure is clinical and therefore humane to the prisoner, and, for the victim's family and community, it relieves pain, ends suffering, and brings healing and closure. For example, after the Oklahoma City bombing in 1995, President Clinton told the nation, "wounds take a long time to heal, but we must begin," and then called for the execution of the perpetrators.<sup>59</sup> Six years later, Timothy McVeigh was killed by lethal injection.

Nevertheless, a year after Clinton's decree, the nation's leading health care associations (American Medical Association, American Nurses Association, and American Public Health Association) issued a joint statement that called participation by medical professionals in lethal injection "extremely troublesome" because "when the health care professional serves in an execution under circumstances that mimic care, the healing purposes of health services and technology become perverted." The statement concludes: "This . . . is not intended to be a statement regarding the rightness or wrongness of capital punishment in our society."

## Lethal Injection and the Corruption of Medicine

The American Medical Association (AMA) has told its 290,000 members that "an individual's opinion on capital punishment is the personal, moral decision of the individual," and the Council on Ethical and Judicial Affairs (CEJA) of the AMA also asserted that a physician "should not be a participant in a legally authorized execution." When the execution method is lethal injection, CEJA lists eight criteria that constitute direct participation: injecting lethal drugs, inspecting or maintaining injection devices, supervising personnel who perform injections, ordering lethal drugs, selecting IV sites, placing IV lines, monitoring vital signs, and pronouncing the prisoner dead.<sup>61</sup>

Oddly enough, the strongest ethical objections to physicians' participation in lethal injection were raised before the method was first used. In 1980, Curran and Casscells noted that "the ethical principles of the medical profession worldwide should be interpreted to unconditionally condemn medical participation in this new form of capital punishment." Although the authors do not state an opinion on the ethics of capital punishment per se, they

argue that lethal injection "seems to us to constitute a grievous expansion of medical condonation of and participation in capital punishment."<sup>63</sup>

But physician participation in lethal injection is actually frequent, state sanctioned, and, in some cases, *essential*. Furthermore, a surprising number of physicians in the United States are unaware of any "official" moral or ethical objection to participation in capital punishment. A recent physician survey demonstrated that 41% of the respondents would perform one of the eight actions disallowed by the AMA, and 25% would perform at least five. Only 3% of the respondents were even aware of the existence of guidelines on this issue. In fact, membership in the AMA was associated with a willingness to perform disallowed actions. The most common rationale for such willing participation was a perceived duty to society.<sup>64</sup>

Why do physicians suffer from such profound moral confusion? Possibly because lethal injection creates a paradox: While it is morally objectionable for a physician to participate in capital punishment, capital punishment itself claims not to be morally objectionable. Furthermore, national medical organizations forbid their members from participating in a procedure that mimics the activities of their professional lives. Despite such admonishment, lethal injection looks like a common medical procedure. That appearance is why many doctors who take the Hippocratic oath and accept the World Medical Association's Declaration of Geneva ("even under threat, I will not use my medical knowledge contrary to the laws of humanity") are unable to make the moral distinction between using their professional skills for healing or for killing.<sup>65</sup>

The Nazi T-4 program, under the guise of protecting the public's health, turned doctors into murderers. Similarly, lethal injection pretends to protect society and heal its wounds, but instead it corrupts the professionals who participate in it. It corrupts prosecutors and judges who send children and the mentally ill to death row, it corrupts pardon boards (who rubber-stamp death sentences) and governors (who have the authority to commute death sentences but seldom use it), and it most notably corrupts physicians.

#### Conclusion

As Lifton and Mitchell note in Who Owns Death:

Not only do healers become killers but, perhaps even more important, a healing profession lends its knowledge and practice to obscuring the fact of killing. The situation is structured so that even when doctors themselves refuse to take part, their professional authority is claimed by technicians (themselves medically trained) who carry out the injections. With this diffusion of responsibility, the corruption also becomes amorphous. More than just individual doctors, medical practice in general becomes tainted and corrupted in the extreme.<sup>66</sup>

Capital punishment in the United States has evolved from a public spectacle (public hangings) to a more private one (gruesome electrocutions witnessed by a few), to a method of execution that resembles the administering of a general anesthetic. While new execution technologies may develop, the current method of lethal injection, which can be performed only with the help of doctors and other healthcare professionals, puts physicians in a unique position: one that can challenge the moral rightness of capital punishment. Furthermore, physicians have an obligation to provide society with moral protection.<sup>67</sup> Doctors failed to do so in Nazi Germany, with disastrous consequences. Lethal injection is creating a similar moral failure for physicians in the United States. If it is wrong (and corrupting) for physicians, nurses, and technicians to participate in capital punishment, then it is also wrong for everyone else. Therefore, physicians and their professional organizations in the United States must not only ban physician participation, but call for abolition of the entire enterprise of capital punishment as well.

#### References

- **1.** "Procedure for Execution," Administrative Directive 96-06, Arkansas Department of Correction, Pine Bluff, Arkansas, 1996.
- **2.** See note 1.
- **3.** R. Bragg, "An Evening of Death, Punishment for 3 Murderers," *New York Times*, 10 January 1997, sec. A.
- **4.** "List of Individuals Executed Since 1976," from Death Penalty Information Center, www.deathpenaltyinfo.org/facts.html#1.

- 5. D. Colburn, "Oklahoma was the First," Washington Post, 11 Dec. 1990, sec. Z14.
- **6.** K. Anderson, "A More 'Palatable' Way of Killing: Texas Carries out First Execution by Lethal Injection," *Time*, 20 December 1982, 28.
- 7. B. Hornsby, "It's Time to Adopt Lethal Injection: Death Penalty Option is Needed to Temper Justice with Compassion," Fulton County Daily Report, 11 August 1997.
- **8.** S. Trombley, The Execution Protocol: Inside America's Capital Punishment Industry (New York: Crown, 1992), p. 115.
- 9. See note 7.
- 10. G. Zoroya, "Suit Says Death by Gas is Slow, Painful, Hardly Humane," Orange County Register, 20 April 1992, sec. A.
- **11.** K. Simpson, "Debate Flares over Injections; Critics Say Lethal Shots Not Humane," *Denver Post*, 15 September 1997, sec. A.
- **12.** S. Trombley, "Inside Story: Back From the Death Watch," *The Guardian*, 21 January 1993, 10.
- **13.** "Death Penalty Must Be Abolished, Catholic Nun Tells AAPL," *Psychiatric News*, 4 December 1998, available at www.psych.org/pnews/98-12-04/death.html.
- **14.** See note 7, p. 321.
- **15.** J. Price, "Doctors in hot seat for execution role," *Washington Times*, 3 January 1991, sec A.
- **16.** R. J. Lifton and G. Mitchell, Who owns death? Capital Punishment, the American Conscience and the End of Executions (New York: HarperCollins, 2000), 97.
- 17. American College of Physicians; Human Rights Watch; The National Coalition to Abolish the Death Penalty; and Physicians for Human Rights. *Breach of Trust: Physician Participation in Executions in the United States* (Authors, 1994), 24.
- **18.** R. K. Shull, "No way to kill with 'civility.'" *Indianapolis News*, 13 August 1996, sec. A.
- 19. The autopsy photographs demonstrating the right subclavian central venous catheter were obtained by an "Open Records Act Request" by Attorney Matthew Rubenstein, Multi-County Public Defender, Atlanta, Georgia. The photographs were reviewed by the author, who uses the same catheter in the clinical care of critically ill patients.
- **20.** E. Pooley, "Death or life?" *Time*, 16 June 1997, 31.
- **21.** "Grisly Business of Executions Brought into Light of Day," St. Louis Post-Dispatch, 10 October 1997, 16A.
- **22.** "Arkansas Executes Two Killers, Then Third After Reprieve Fails," *Commercial Appeal*, 9 January 1997, sec. A.
- **23.** C. Hoppe, "Killing for Fun and Profit," San Francisco Chronicle, 27 October 1995, sec. A.
- **24.** H. Kennedy, "A Quick and Clinical Exit Awaits Terrorist," *Daily News*, 10 June 2001, 4.
- **25.** C. Hoppe, "Board: Family of Victims See Execution; Texas Attorney General Must Approve New Policy," *Dallas Morning News*, 16 September 1995, sec. A.
- **26.** "Oklahoma Executes Convicted Killer," *United Press International*, 1 July 1995.

- 27. L. Lafay, "On Night of Execution, Schartner's Kin Gathers," *The Virginian-Pilot*, 24 July 1997, sec. A.
- **28.** C. Goldberg, "Families Hope Freeway Killer's Execution Ends Their Years of Pain," *New York Times*, 22 February 1996, sec. A.
- **29.** M. Skertic, "Silent McVeigh Put to Death: 'This Man Will Never Hurt Us Again,'" *Chicago Sun Times*, 12 June 2001, 1.
- **30.** R. J. Lifton, The Nazi Doctors: Medical Killing and the Psychology of Genocide, (New York: Basic Books, 1986), pp. 1–18.
- **31.** H. G. Gallagher, By Trust Betrayed: Patients, Physicians, and the Liscense to Kill in the Third Reich (Arlington, VA: Vandamere Press, 1995), pp.65-87.
- **32.** H. M. Hanauske-Abel, "Not a Slippery Slope or Sudden Subversion: German Medicine and National Socialism in 1933," *British Medical Journal* 313 (1996): 1453–1463.
- **33.** H. Friedlander, *The Origins of the Nazi Genocide: From Euthanasia to the Final Solution* (Chapel Hill: University of North Carolina Press, 1995), pp. 62–85.
- **34.** See note 31, p. 66.
- **35.** See note 31, p. 65-87.
- 36. See note 33, pp. 88-104.
- 37. M. Burleigh, "Saving Money, Spending Lives: Psychiatry, Society, and the 'Euthanasia' Programme," in: M. Burleigh (ed), Confronting the Nazi Past: New Debates on Modern German History (New York: St. Martin's, 1996), pp. 98–111.
- **38.** See note 31, pp. 15–42.
- **39.** See note 31, pp. 15–42.
- **40.** See note 31, pp. 45–79.
- **41.** D. J. Goldhagen, *Hitler's Willing Executioners: Ordinary Germans and the Holocaust* (New York: Knopf, 1996), pp. 469–471.
- **42.** Retrieved April 2002 from the Death Penalty Information Center, www.deathpenaltyinfo.org.
- **43.** M. Abu Jamal, *Live from Death Row* (New York: Addison-Wesley, 1995), p. 7.
- **44.** M. B. Ross, "No Death Sentences for Abnormal Killers," *National Law Journal*, 14 April 1997, sect. A.
- **45.** D. O. Lewis, J. H. Pincus, M. Feldman, L. Jackson, and B. Bard, "Psychiatric, Neurological, and Psychoeducational Characteristics of 15 Death Row Inmates in the United States," *American Journal of Psychiatry* 143 (1986): 838–845.
- **46.** "Beyond Reason: The Death Penalty and Offenders with Mental Retardation," available from Human Rights Watch at www.hrw.org/reports/2001/ustat.
- **47.** "Juveniles and the Death Penalty," available from the Death Penalty Information Center at www.deathpenaltyinfo.org/juvchar.html.
- **48.** Amnesty International, On the Wrong Side of History: Children and the Death Penalty in the USA, AI Index: AMR 51/58/1998 (1998). Available at www.amnesty.org.
- **49.** S. A. Drizin and S. K. Harper, "Old Enough to Kill, Old Enough to Die," *San Francisco Chronicle*, 16 April 2000, 1.

- **50.** Stanford v Kentucky (1989).
- **51.** D. O. Lewis, J. H. Picus, B. Bard, et al., "Neuropsychiatric, Psychoeducational, and Family Characteristics of 14 Juveniles Condemned to Death in the United States," *American Journal of Psychiatry* 145 (1988): 584–589.
- **52.** See note 45.
- **53.** "Lethal Injection, Under Death Sentence," Administrative and Execution Procedures, Georgia Department of Corrections, Atlanta, GA, 1 May 2000.
- **54.** See note 31, p. 14.
- **55.** See note 31, p. 16.
- **56.** M. Himaka, "Judge Sentences David Lucas to Die for Three Murders," *San Diego Union Tribune*, 20 September 1989, sec. B-1.
- **57.** D. U. Himmelstein and S. Woolhandler, "The Silence of the Doctors: Fifty Years After Nuremberg," *Journal of General Internal Medicine* 13 (1998): 422–423.
- **58.** See note 33, pp. 285–287.
- **59.** C. Conolly, "A time of healing," St. Petersburg Times, 24 April 1995, sec. 1A.
- **60.** American Nurses Association, "Professional Societies Oppose Health Care Professionals' Participation in Capital Punishment" (press release), 13 September 1996, available at www.nursingworld.org/pressrel/1996/execut1.htm.
- **61.** American Medical Association, "Opinion 2.06: Capital Punishment," in *Code of Medical Ethics: Current Opinions with Annotations* (Chicago: AMA Press, 2000).
- **62.** W. J. Curran and W. Casscells, "The Ethics of Medical Participation in Capital Punishment by Intravenous Injection," *New England Journal of Medicine* 320/4 (1980): pp. 226–230.
- **63.** See note 62.
- **64.** N. J. Farber, B. M. Aboff, J. Weiner, et al., "Physicians' Willingness to Participate in the Process of Lethal Injection for Capital Punishment," *Annals of Internal Medicine* 135/10 (2001): 884–888.
- **65.** See note 62, p. 227.
- 66. See note 16, p. 235.
- **67.** M. K. Wynia, S. R. Latham. A. C. Kao, J. W. Berg, and L. L. Emanuel, "Medical Professionalism in Society," *New England Journal of Medicine* 341/21 (1999): pp. 1612–1616.