



When Law and Ethics Collide — Why Physicians Participate in Executions

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On February 14, 2006, a U.S. District Court issued an unprecedented ruling concerning the California execution by lethal injection of murderer Michael Morales. The ruling ordered that the state

have a physician, specifically an anesthesiologist, personally supervise the execution, or else drastically change the standard protocol for lethal injections.¹ Under the protocol, the anesthetic sodium thiopental is given at massive doses that are expected to stop breathing and extinguish consciousness within one minute after administration; then the paralytic agent pancuronium is given, followed by a fatal dose of potassium chloride.

The judge found, however, that evidence from execution logs showed that six of the last eight prisoners executed in California had not stopped breathing before technicians gave the paralytic agent, raising a serious possibil-

ity that prisoners experienced suffocation from the paralytic, a feeling much like being buried alive, and felt intense pain from the potassium bolus. This experience would be unacceptable under the Constitution's Eighth Amendment protections against cruel and unusual punishment. So the judge ordered the state to have an anesthesiologist present in the death chamber to determine when the prisoner was unconscious enough for the second and third injections to be given — or to perform the execution with sodium thiopental alone.

The California Medical Association, the American Medical Association (AMA), and the American Society of Anesthesiologists (ASA)

immediately and loudly opposed such physician participation as a clear violation of medical ethics codes. "Physicians are healers, not executioners," the ASA's president told reporters. Nonetheless, in just two days, prison officials announced that they had found two willing anesthesiologists. The court agreed to maintain their anonymity and to allow them to shield their identities from witnesses. Both withdrew the day before the execution, however, after the Court of Appeals for the Ninth Circuit added a further stipulation requiring them personally to administer additional medication if the prisoner remained conscious or was in pain.² This they would not accept. The execution was then postponed until at least May, but the court has continued to require that medical professionals assist with the administration of any lethal injection given to Morales.

This turn of events is the culmination of a steady evolution in methods of execution in the United States. On July 2, 1976, in deciding the case of *Gregg v. Georgia*, the Supreme Court legalized capital punishment after a decade-long moratorium on executions. Executions resumed six months later, on January 17, 1977, in Utah, with the death by firing squad of Gary Gilmore for the killing of Ben Bushnell, a Provo motel manager.

Death by firing squad, however, came to be regarded as too bloody and uncontrolled. (Gilmore's heart, for example, did not stop until two minutes afterward, and shooters have sometimes weakened at the trigger, as famously happened in 1951 in Utah when the five riflemen fired away from the target over Elisio Mares's heart, only to hit his right chest and cause him to bleed slowly to death).³

Hanging came to be regarded as still more inhumane. Under the best of circumstances, the cervical spine is broken at C2, the diaphragm is paralyzed, and the prisoner suffocates to death, a minutes-long process.

Gas chambers proved no better: asphyxiation from cyanide gas, which prevents cells from using oxygen by inactivating cytochrome oxidase, took even longer than death by hanging, and the public revolted at the vision of suffocating prisoners fighting for air and then seizing as the hypoxia worsened. In Arizona, in 1992, for example, the asphyxiation of triple murderer Donald Harding took 11 minutes, and the sight was so horrifying that reporters began crying, the attorney general vomited, and the prison warden announced he would resign if forced to conduct an-

other such execution.⁴ Since 1976, only 2 prisoners have been executed by firing squad, 3 by hanging, and 12 by gas chamber.⁵

Electrocution, thought to cause a swifter, more acceptable death, was used in 74 of the first 100 executions after *Gregg*. But officials found that the electrical flow fre-



quently arced, cooking flesh and sometimes igniting prisoners — postmortem examinations frequently had to be delayed for the bodies to cool — and yet some prisoners still required repeated jolts before they died. In Alabama, in 1979, for example, John Louis Evans III was still alive after two cycles of 2600 V; the warden called Governor George Wallace, who told him to keep going, and only after a third cycle, with witnesses screaming in the gallery, and almost 20 minutes of suffering did Evans finally die.³ Only Florida, Virginia, and Alabama persisted with electrocutions with any frequency, and under threat of Supreme Court review, they too abandoned the method.

Lethal injection now appears to be the sole method of execution accepted by courts as humane enough to satisfy Eighth Amendment requirements — largely because it medicalizes the process. The prisoner is laid supine on a hospital gurney. A white bedsheet is drawn to his

chest. An intravenous line flows into his or her arm. Under the protocol devised in 1977 by Dr. Stanley Deutsch, the chairman of anesthesiology at the University of Oklahoma, prisoners are first given 2500 to 5000 mg of sodium thiopental (5 to 10 times the recommended maximum), which can produce death all by itself by causing complete cessation of the brain's electrical activity followed by respiratory arrest and circulatory collapse. Death, however, can take up to 15 minutes or longer with thiopental alone, and the prisoner may appear to gasp, struggle, or convulse. So 60 to 100 mg of the paralytic agent pancuronium (10 times the usual dose) is injected one minute or so after the thiopental. Finally, 120 to 240 meq of potassium is given to produce rapid cardiac arrest.

Officials liked this method. Because it borrowed from established anesthesia techniques, it made execution like familiar medical procedures rather than the grisly, backlash-inducing spectacle it had become. (In Missouri, executions were even moved to a prison-hospital procedure room.) It was less disturbing to witness. The drugs were cheap and routinely available. And officials could turn to doctors and nurses to help with technical difficulties, attest to the painlessness and trustworthiness of the technique, and lend a more professional air to the proceedings.

But medicine balked. In 1980, when the first execution was planned using Dr. Deutsch's technique, the AMA passed a resolution against physician participation as a violation of core medical ethics. It affirmed that ban in detail in its 1992 Code of Medical Ethics. Article 2.06 states, "A physician, as a member of a profes-

sion dedicated to preserving life when there is hope of doing so, should not be a participant in a legally authorized execution,” although an individual physician’s opinion about capital punishment remains “the personal moral decision of the individual.” It states that unacceptable participation includes prescribing or administering medications as part of the execution procedure, monitoring vital signs, rendering technical advice, selecting injection sites, starting or supervising placement of intravenous lines, or simply being present as a physician. Pronouncing death is also considered unacceptable, because the physician is not permitted to revive the prisoner if he or she is found to be alive. Only two actions were acceptable: provision at the prisoner’s request of a sedative to calm anxiety beforehand and certification of death after another person had pronounced it.

The code of ethics of the Society of Correctional Physicians establishes an even stricter ban: “The correctional health professional shall . . . not be involved in any aspect of execution of the death penalty.” The American Nurses Association (ANA) has adopted a similar prohibition. Only the national pharmacists’ society, the American Pharmaceutical Association, permits involvement, accepting the voluntary provision of execution medications by pharmacists as ethical conduct.

States, however, wanted a medical presence. In 1982, in Texas, Dr. Ralph Gray, the state prison medical director, and Dr. Bascom Bentley agreed to attend the country’s first execution by lethal injection, though only to pronounce death. But once on the scene, Gray was persuaded to examine

the prisoner to show the team the best injection site.⁶ Still, the doctors refused to give advice about the injection itself and simply watched as the warden prepared the chemicals. When he tried to push the syringe, however, it did not work. He had mixed all the drugs together, and they had pre-

Just by being present, by having expertise, Dr. A had opened himself to being called on to take responsibility for the execution.

cipitated into a clot of white sludge. “I could have told you that,” one of the doctors reportedly said, shaking his head.³ Afterward, Gray went to pronounce the prisoner dead but found him still alive. Though the doctors were part of the team now, they did nothing but suggest allowing time for more drugs to run in.

Today, all 38 death-penalty states rely on lethal injection. Of 1012 murderers executed since 1976, 844 were executed by injection.⁵ Against vigorous opposition from the AMA and state medical societies, 35 of the 38 states explicitly allow physician participation in executions. Indeed, 17 require it: Colorado, Florida, Georgia, Idaho, Louisiana, Mississippi, Nevada, North Carolina, New Hampshire, New Jersey, New Mexico, Oklahoma, Oregon, South Dakota, Virginia, Washington, and Wyoming. To protect participating physicians from license challenges for violating ethics codes, states commonly provide legal im-

munity and promise anonymity. Nonetheless, several physicians have faced such challenges, though none have lost their licenses as yet.⁷ And despite the promised anonymity, several states have produced the physicians in court to vouch publicly for the legitimacy and painlessness of the procedure.

States have affirmed that physicians and nurses — including those who are prison employees — have a right to refuse to participate in any way in executions. Yet they have found physicians and nurses who are willing to participate. Who are these people? And why do they do it?

It is not easy to find answers to these questions. The medical personnel are difficult to identify and reluctant to discuss their roles, even when offered anonymity. Among the 15 medical professionals I located who have helped with executions, however, I found 4 physicians and 1 nurse who agreed to speak with me; collectively, they have helped with at least 45 executions. None were zealots for the death penalty, and none had a simple explanation for why they did this work. The role, most said, had crept up on them.

Dr. A has helped with about eight executions in his state. He was extremely uncomfortable talking about the subject. Nonetheless, he sat down with me in a hotel lobby in a city not far from where he lives and told me his story.

Almost 60 years old, he is board certified in internal medicine and critical care, and he and his family have lived in their small town for 30 years. He is well respected. Almost everyone of local standing comes to see him as their primary care physician —

the bankers, his fellow doctors, the mayor. Among his patients is the warden of the maximum-security prison that happens to be in his town. One day several years ago, they got talking during an appointment. The warden complained of difficulties staffing the prison clinic and asked Dr. A if he would be willing to see prisoners there occasionally. Dr. A said he would. He'd have made more money in his own clinic — the prison paid \$65 an hour — but the prison was important to the community, he liked the warden, and it was just a few hours of work a month. He was happy to help.

Then, a year or two later, the warden asked him for help with a different problem. The state had a death penalty, and the legislature had voted to use lethal injection exclusively. The executions were to be carried out in the warden's prison. He needed doctors, he said. Would Dr. A help? He would not have to deliver the lethal injection. He would just help with cardiac monitoring. The warden gave the doctor time to consider it.

"My wife didn't like it," Dr. A told me. "She said, 'Why do you want to go there?'" But he felt torn. "I knew something about the past of these killers." One of them had killed a mother of three during a convenience-store robbery and then, while getting away, shot a man who was standing at his car pumping gas. Another convict had kidnapped, raped, and strangled to death an 11-year-old girl. "I do not have a very strong conviction about the death penalty, but I don't feel anything negative about it for such people either. The execution order was given legally by the court. And morally, if you think about the

animal behavior of some of these people. . . ." Ultimately, he decided to participate, he said, because he was only helping with monitoring, because he was needed by the warden and his community, because the sentence was society's order, and because the punishment did not seem wrong.

At the first execution, he was instructed to stand behind a curtain watching the inmate's heart rhythm on a cardiac monitor. Neither the witnesses on the other side of the glass nor the prisoner could see him. A technician placed two IV lines. Someone he could not see pushed the three drugs, one right after another. Watching the monitor, he saw the sinus rhythm slow, then widen. He recognized the peaked T waves of hyperkalemia followed by the fine spikes of ventricular fibrillation and finally the flat, unwavering line of an asystolic arrest. He waited half a minute, then signaled to another physician who went out before the witnesses to place his stethoscope on the prisoner's unmoving chest. The doctor listened for 30 seconds and then told the warden the inmate was dead. Half an hour later, Dr. A was released. He made his way through a side door, past the crowd gathered outside, and headed home.

In three subsequent executions there were difficulties, though, all with finding a vein for an IV. The prisoners were either obese or past intravenous drug users, or both. The technicians would stick and stick and, after half an hour, give up. This was a possibility the warden had not prepared for. Dr. A had placed numerous lines. Could he give a try?

OK, Dr. A decided. Let me take a look.

This was a turning point, though he didn't recognize it at

the time. He was there to help, they had a problem, and so he would help. It did not occur to him to do otherwise.

In two of the prisoners, he told me, he found a good vein and placed the IV. In one, however, he could not find a vein. All eyes were on him. He felt responsible for the situation. The prisoner was calm. Dr. A remembered the prisoner saying to him, almost to comfort him, "No, they can never get the vein." The doctor decided to place a central line. People scrambled to find a kit.

I asked him how he placed the line. It was like placing one "for any other patient," he said. He decided to place it in the subclavian vein, because that is what he most commonly did. He opened the kit for the triple-lumen catheter and explained to the prisoner everything he was going to do. I asked him if he was afraid of the prisoner. "No," he said. The man was perfectly cooperative. Dr. A put on sterile gloves, gown, and mask. He swabbed the man's skin with antiseptic.

"Why?" I asked.

"Habit," he said. He injected local anesthetic. He punctured the vein with one stick. He checked to make sure he had good, non-pulsatile flow. He threaded the guidewire, the dilator, and finally the catheter. All went smoothly. He flushed the lines, secured the catheter to the skin with a stitch, and put a clean dressing on, just as he always does. Then he went back behind the curtain to monitor the lethal injection.

Only one case seemed to really bother him. The convict, who had killed a policeman, weighed about 350 pounds. The team placed his intravenous lines without trouble. But after they had given him all three injections, the

prisoner's heart rhythm continued. "It was an agonal rhythm," Dr. A said. "He was dead," he insisted. Nonetheless, the rhythm continued. The team looked to Dr. A. His explanation of what happened next diverges from what I learned from another source. I was told that he instructed that another bolus of potassium be given. When I asked him if he did, he said, "No, I didn't. As far as I remember, I didn't say anything. I think it may have been another physician." Certainly, however, all boundary lines had been crossed. He had agreed to take part in the executions simply to pronounce death, but just by being present, by having expertise, he had opened himself to being called on to do steadily more, to take responsibility for the execution itself. Perhaps he was not the executioner. But he was darn close to it.

I asked him whether he had known that his actions — everything from his monitoring the executions to helping officials with the process of delivering the drugs — violated the AMA's ethics code. "I never had any inkling," he said. And indeed, the only survey done on this issue, in 1999, found that just 3 percent of doctors knew of any guidelines governing their participation in executions.⁸ The humaneness of the lethal injections was challenged in court, however. The state summoned Dr. A for a public deposition on the process, including the particulars of the execution in which the prisoner required a central line. His local newspaper printed the story. Word spread through his town. Not long after, he arrived at work to find a sign pasted to his clinic door reading, "THE KILLER DOCTOR." A challenge to his medical

license was filed with the state. If he wasn't aware of the AMA's stance on the issue earlier, he was now.

Ninety percent of his patients supported him, he said, and the state medical board upheld his license under a law that defined participation in executions as acceptable activity for a physician.



But he decided that he wanted no part of the controversy anymore and quit. He still defends what he did. Had he known of the AMA's position, though, "I never would have gotten involved," he said.

Dr. B spoke to me between clinic appointments. He is a family physician, and he has participated in some 30 executions. He became involved long ago, when electrocution was the primary method, and then continued through the transition to lethal injections. He remains a participant to this day. But it was apparent that he had been more cautious and reflective about his involvement than Dr. A had. He also seemed more troubled by it.

Dr. B, too, had first been approached by a patient. "One of my patients was a prison investigator," he said. "I never quite understood his role, but he was an intermediary between the state and the inmates. He was hired to

monitor that the state was taking care of them. They had the first two executions after the death penalty was reinstated, and there was a problem with the second one, where the physicians were going in a minute or so after the event and still hearing heartbeats. The two physicians were doing this out of courtesy, because the facility was in their area. But the case unnerved them to the point that they quit. The officials had a lot of trouble finding another doctor after that. So that was when my patient talked to me."

Dr. B did not really want to get involved. He was in his 40s then. He'd gone to a top-tier medical school. He'd protested the Vietnam War in the 1960s. "I've gone from a radical hippie to a middle-class American over the years," he said. "I wasn't on any bandwagons anymore." But his patient said the team needed a physician only to pronounce death. Dr. B had no personal objection to capital punishment. So in the moment — "it was a quick judgment" — he said OK, "but only to do the pronouncement."

The execution was a few days later by electric chair. It was an awful sight, he said. "They say an electrocution is not an issue. But when someone comes up out of that chair six inches, it's not for nothing." He waited a long while before going out to the prisoner. When he did, he performed a systematic examination. He checked for a carotid pulse. He listened to the man's heart three times with a stethoscope. He looked for a pupil response with his pen light. Only then did he pronounce the man dead.

He thought harder about whether to stay involved after that first time. "I went to the library and researched it," and that was when

he discovered the AMA guidelines. As he understood the code, if he did nothing except make a pronouncement of death, he would be acting properly and ethically. (This was not a misreading. The AMA only later distinguished between pronouncing death, which it now considers unethical, and certifying death after someone has made the initial pronouncement, which it considers ethical.)

Knowing the guidelines reassured him about his involvement and made him willing to continue. They also emboldened him to draw thicker boundaries around his participation. During the first lethal injections, he and another physician “were in the room when they were administering the drugs,” he said. “We could see the telemetry. We could see a lot of things. But I had them remove us from that area. I said I do not want any access to the monitor or the EKGs. . . . A couple times they asked me about recommendations in cases in which there were venous access problems. I said, ‘No. I’m not going to assist in any way.’ They would ask about amounts of medicines. They had problems getting the medicines. But I said I had no interest in getting involved in any of that.”

Dr. B kept himself at some remove from the execution process, but he would be the first to admit that his is not an ethically pristine position. When he refused to provide additional assistance, the execution team simply found others who would. He was glad to have those people there. “If the doctors and nurses are removed, I don’t think [lethal injections] could be competently or predictably done. I can tell you I wouldn’t be involved unless those people were involved.”

“I agonize over the ethics of this every time they call me to go down there,” he said. His wife knew about his involvement from early on, but he could not bring himself to tell his children until they were grown. He has let almost no one else know. Even his medical staff is unaware.

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The trouble is not that the lethal injections seem cruel to him. “Mostly, they are very peaceful,” he said. The agonizing comes instead from his doubts about whether anything is accomplished. “The whole system doesn’t seem right,” he told me toward the end of our conversation. “I guess I see more and more [executions], and I really wonder. . . . It just seems like the justice system is going down a dead-end street. I can’t say that [lethal injection] lessens the incidence of anything. The real depressing thing is that if you don’t get to these people before the age of three or four or five, it’s not going to make any difference in what they do. They’ve struck out before they even started kindergarten. I don’t see [executions] as saying anything about that.”

The medical people most wary of speaking to me were those who worked as full-time employees in state prison systems. Nonetheless, two did agree to speak,

one a physician in a Southern state prison and the other a nurse who had worked in a prison out West. Both were less uncertain about being involved in executions than Dr. A or Dr. B.

The physician, Dr. C, was younger than the others and relatively junior among his prison’s doctors. He did not trust me to keep his identity confidential, and I think he worried for his job if anyone found out about our conversation. As a result, although I had independent information that he had participated in at least two executions, he would speak only in general terms about the involvement of doctors. But he was clear about what he believed.

“I think that if you’re going to work in the correctional setting, [participating in executions] is potentially a component of what you need to do,” he said. “It is only a tiny part of anything that you’re doing as part of your public health service. A lot of society thinks these people should not get any care at all.” But in his job he must follow the law, and it obligates him to provide proper care, he said. It also has set the prisoners’ punishment. “Thirteen jurors, citizens of the state, have made a decision. And if I live in that state and that’s the law, then I would see it as being an obligation to be available.”

He explained further. “I think that if I had to face someone I loved being put to death, I would want that done by lethal injection, and I would want to know that it is done competently.”

The nurse saw his participation in fairly similar terms. He had fought as a Marine in Vietnam and later became a nurse. As an Army reservist, he served with a surgical unit in Bosnia and in

Iraq. He worked for many years on critical care units and, for almost a decade, as nurse manager for a busy emergency department. He then took a job as the nurse-in-charge for his state penitentiary, where he helped with one execution by lethal injection.

It was the state's first execution by this method, and "at the time, there was great naiveté about lethal injection," he said. "No one in that state had any idea what was involved." The warden had the Texas protocol and thought it looked pretty simple. What did he need medical personnel for? The warden told the nurse that he would start the IVs himself, though he had never started one before.

"Are you, as a doctor, going to let this person stab the inmate for half an hour because of his inexperience?" the nurse asked me. "I wasn't." He said, "I had no qualms. If this is to be done correctly, if it is to be done at all, then I am the person to do it."

This is not to say that he felt easy about it, however. "As a Marine and as a nurse . . . , I hope I will never become someone who has no problem taking another person's life." But society had decided the punishment and had done so carefully with multiple judicial reviews, he said. The convict had killed four people even while in prison. He had arranged for an accomplice to blow up the home of a county attorney he was angry with while the attorney, his wife, and their child were inside. When the accomplice turned state's evidence, the inmate arranged for him to be tortured and killed at a roadside rest stop. The nurse did not disagree with the final judgment that this man should be put to death.

The nurse took his involvement seriously. "As the leader of the

health care team," he said, "it was my responsibility to make sure that everything be done in a way that was professional and respectful to the inmate as a human being." He spoke to an official with the state nursing board about the process, and although involvement is against the ANA's ethics



code, the board said he could do everything except push the drugs.

So he issued the purchase request to the pharmacist supplying the drugs. He did a dry run with the public citizen chosen to push the injections and with the guards to make sure they knew how to bring the prisoner out and strap him down. On the day of the execution, the nurse dressed as if for an operation, in scrubs, mask, hat, and sterile gown and gloves. He explained to the prisoner exactly what was going to happen. He placed two IVs and taped them down. The warden read the final order to the prisoner and allowed him his last words. "He didn't say anything about his guilt or his innocence," the nurse said. "He just said that the execution made all of us involved killers just like him."

The warden gave the signal to start the injection. The nurse hooked the syringe to the IV port and told the citizen to push the sodium thiopental. "The inmate started to say, 'Yeah, I can

feel . . . ' and then he passed out." They completed the injections and, three minutes later, he flatlined on the cardiac monitor. The two physicians on the scene had been left nothing to do except pronounce the inmate dead.

I have personally been in favor of the death penalty. I was a senior official in the 1992 Clinton presidential campaign and in the administration, and in that role I defended the President's stance in support of capital punishment. I have no illusions that the death penalty deters anyone from murder. I also have great concern about the ability of our justice system to avoid putting someone innocent to death. However, I believe there are some human beings who do such evil as to deserve to die. I am not troubled that Timothy McVeigh was executed for the 168 people he had killed in the Oklahoma City bombing, or that John Wayne Gacy was for committing 33 murders. The European Union refuses to participate in any way in the trial of Saddam Hussein because of the court's insistence on allowing the death penalty as a possible punishment, but given Hussein's role in the massacre of more than 100,000 people, the European position only puzzles me.

Still, I have always regarded involvement in executions by physicians and nurses as wrong. The public has granted us extraordinary and exclusive dispensation to administer drugs to people, even to the point of unconsciousness, to put needles and tubes into their bodies, to do what would otherwise be considered assault, because we do so on their behalf — to save their lives and provide them comfort. To have the state

take control of these skills for its purposes against a human being — for punishment — seems a dangerous perversion. Society has trusted us with powerful abilities, and the more willing we are to use these abilities against individual people, the more we risk that trust. The public may like executions, but no one likes executioners.

My conversations with the physicians and the nurse I had tracked down, however, rattled both of these views — and no conversation more so than one I had with the final doctor I spoke to. Dr. D is a 45-year-old emergency physician. He is also a volunteer medical director for a shelter for abused children. He works to reduce homelessness. He opposes the death penalty because he regards it as inhumane, immoral, and pointless. And he has participated in six executions so far.

About eight years ago, a new jail was built down the street from the hospital where he worked, and it had an infirmary “the size of our whole emergency room.” The jail needed a doctor. So, out of curiosity as much as anything, Dr. D began working there. “I found that I loved it,” he said. “Jails are an underserved niche of health care.” Jails, he pointed out, are different from prisons in that they house people who are arrested and awaiting trial. Most are housed only a few hours to days and then released. “The substance abuse and noncompliance is high. The people have a wide variety of medical needs. It is a fascinating population. The setting is very similar to the ER. You can make a tremendous impact on people and on public health.” Over time, he shifted more and more of his work to the jail system. He built a medical group

for the jails in his area and soon became an advocate for correctional medicine.

Three years ago, the doctors who had been involved in executions in his state pulled out. Officials asked Dr. D if his group would take the contract. Before answering, he went to witness an execution. “It was a very emo-

“This is an end-of-life issue, just as with any other terminal disease. It just happens that it involves a legal process instead of a medical process.”

tional experience for me,” he said. “I was shocked to witness something like this.” He had opposed the death penalty since college, and nothing he saw made him feel any differently. But, at the same time, he felt there were needs that he as a correctional physician could serve.

He read about the ethics of participating. He knew about the AMA’s stance against it. Yet he also felt an obligation not to abandon inmates in their dying moments. “We, as doctors, are not the ones deciding the fate of this individual,” he said. “The way I saw it, this is an end-of-life issue, just as with any other terminal disease. It just happens that it involves a legal process instead of a medical process. When we have a patient who can no longer survive his illness, we as physicians must ensure he has comfort. [A death-penalty] patient is no different from a patient dying

of cancer — except his cancer is a court order.” Dr. D said he has “the cure for this cancer” — abolition of the death penalty — but “if the people and the government won’t let you provide it, and a patient then dies, are you not going to comfort him?”

His group took the contract, and he has been part of the medical team for each execution since. The doctors are available to help if there are difficulties with IV access, and Dr. D considers it their task to ensure that the prisoner is without pain or suffering through the process. He himself provides the cardiac monitoring and the final determination of death. Watching the changes on the two-line electrocardiogram tracing, “I keep having that reflex as an ER doctor, wanting to treat that rhythm,” he said. Aside from that, his main reaction is to be sad for everyone involved — the prisoner whose life has led to this, the victims, the prison officials, the doctors. The team’s payment is substantial — \$18,000 — but he donates his portion to the children’s shelter where he volunteers.

Three weeks after speaking to me, he told me to go ahead and use his name. It is Dr. Carlo Musso. He helps with executions in Georgia. He didn’t want to seem as if he was hiding anything, he said. He didn’t want to invite trouble, either. But activists have already challenged his license and his membership in the AMA, and he is resigned to the fight. “It just seems wrong for us to walk away, to abdicate our responsibility to the patients,” he said.

There is little doubt that lethal injection can be painless and

peaceful, but as courts have recognized, this requires significant medical assistance and judgment — for placement of intravenous lines, monitoring of consciousness, and adjustments in medication timing and dosage. In recent years, medical societies have persuaded two states, Kentucky and Illinois, to pass laws forbidding physician participation in executions. Nonetheless, officials in each of these states intend to continue to rely on medical supervision, employing nurses and nurse-anesthetists instead. How, then, to reconcile the conflict between government efforts to ensure a medical presence and our ethical principles forbidding it? Are our ethics what should change?

The doctors' and nurse's arguments for competence and comfort in the execution process do have some force. But however much they may wish to be there for an inmate, it seems clear that the inmate is not really their patient. Unlike genuine patients, an inmate has no ability to refuse the physicians' "care" — indeed, the inmate and his family are not even permitted to know the physician's identity. And the medical assistance provided primarily serves the government's purposes — not the inmate's needs as a patient. Medicine is being made an instrument of punishment. The hand of comfort that more gently places the IV, more carefully times the bolus of potassium, is also the hand of death. We cannot escape this truth. The ethics codes seem right.

It is this truth that persuades me that we should seek a legal ban on the participation of physicians and nurses in executions. And if it turns out that execu-

tions cannot then be performed without, as the courts put it, "unconstitutional pain and cruelty," the death penalty should be abolished.

It is far from clear that a society that punishes its most evil murderers with life imprisonment is worse off than one that punishes them with death. But a society in which the government actively subverts core ethical principles of medical practice is patently worse off for it. The government has shown willingness to use medical skills against individuals for its own purposes — having medical personnel assist in the interrogation of prisoners, for example, place feeding tubes for force-feeding them, and help with executing them. As medical abilities advance, government interest in our skills will only increase. Preserving the integrity of our ethics could not be more important.

The four physicians and the nurse I spoke to all acted against long-standing principles of their professions. Their actions have made our ethics codes effectively irrelevant in society. Yet, it must be said, most took their moral duties seriously. It is worth reflecting on this truth as well.

The easy thing for any doctor or nurse is simply to follow the written rules. But each of us has a duty not to follow rules and laws blindly. In medicine, we face conflicts about what the right and best actions are in all kinds of areas: relief of suffering for the terminally ill, provision of narcotics for patients with chronic pain, withdrawal of care for the critically ill, abortion, and executions, to name just a few. All have been the subject of professional rules and government regulation, and at times those

rules and regulations will be wrong. We will then be called on to make a choice. We must do our best to choose intelligently and wisely.

Sometimes, however, we will be wrong — as I think the doctors and nurses are who have used their privileged skills to make possible 844 deaths by lethal injection thus far. We each should then be prepared to accept the consequences. Unlike Dr. Musso, however, nearly all these doctors and nurses have sought to keep their actions hidden in order not to face the consequences. In the final analysis, I think this is what makes their actions seem particularly troubling. We cannot blame them for their impulse to hide. But we cannot admire them either.

An interview with Dr. Carlo Musso can be heard at www.nejm.org.

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1. Michael Angelo Morales v. Roderick Q. Hickman, No. C 06 219 JF, (Dist. Ct. Northern Dist. of Cal. February 14, 2006).
2. Michael Angelo Morales v. Roderick Q. Hickman, No. CV 06 00926 JF (9th Cir. February 20, 2006).
3. Trombley S. The execution protocol: inside America's capital punishment industry. New York: Crown, 1992.
4. Solotaroff I. The last face you'll ever see: the private life of the American death penalty. New York: HarperCollins, 2001:7.
5. Death Penalty Information Center execution database. Accessed March 1, 2006, at <http://www.deathpenaltyinfo.org/executions.php>.
6. Breach of trust: physician participation in executions in the United States. Philadelphia: American College of Physicians, 1994.
7. Norbut M. Complaint cites Georgia doctors who took part in executions. American Medical News. July 4, 2005:1.
8. Farber NJ, Aboff BM, Weiner J, Davis EB, Boyer EG, Ubel PA. Physicians' willingness to participate in the process of lethal injections for capital punishment. *Ann Intern Med* 2001;135:884-8.